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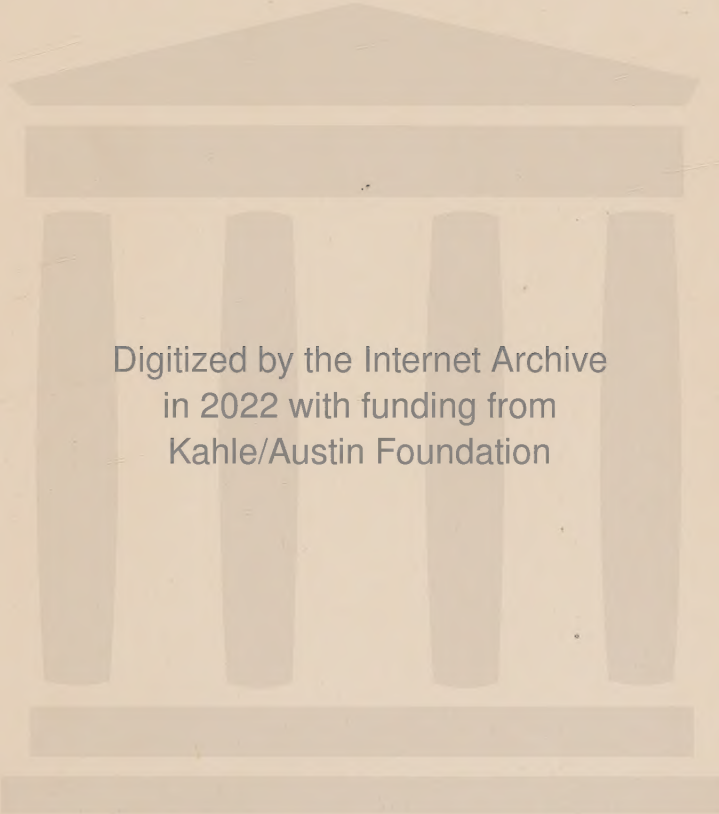
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The Use of Practice Exercises in the Teaching of Capitalization and Punctuation

BY

JOHN PAUL LEONARD, PH.D.

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J. P. L.

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THE USE OF PRACTICE EXERCISES IN THE TEACHING OF CAPITALIZATION AND PUNCTUATION

CHAPTER I

THE PROBLEM AND ITS LITERATURE

THE PROBLEM

The central problem of this study is to determine whether the use of practice exercises in the nature of proof-reading, error correction, and dictation practice materials improves pupils' ability to write compositions free from errors. The investigator also sought:

- (a) To study the effect of teaching by practice exercises on the accomplishment in achievement tests in punctuation and capitalization.
- (b) To determine the permanency of learning by practice exercises.
- (c) To determine the validity and reliability of a test to measure abilities in punctuation and capitalization.

MEANING OF TERMS

In this study the term "practice exercises" is applied to practice materials of three types—proof-reading, error correction, and dictation. Groups of sentences in which all punctuation and capitalization have been omitted and the pupil is asked to supply them are called proof-reading practice exercises. Groups of sentences in which the punctuation and capitalization are incorrect and the pupil is asked to correct them are called correction practice exercises. The term "dictation practice exercises" is applied to any material dictated to the pupil by the teacher. The pupils are required to write and punctuate correctly these dictated sentences.

SIGNIFICANCE OF THE PROBLEM

The problem is of chief importance in its attempt to determine the effectiveness of certain established methods of teaching punctuation and capitalization to pupils of the junior high school level. This study is not primarily concerned with a measure of punctuation ability or with using these three types of practice exercises as instruments to measure pupils' abilities in punctuation and capitalization. Dr. Matthew H. Willing¹ in his study made at the Lincoln School of Teachers College concluded that practically no relationship existed between being able to correct punctuation errors in another's writings and ability to punctuate one's own compositions correctly. The present study, however, is concerned with the effect of these three types of practice exercises on learning how to punctuate.

Upon first thought it would seem that no one would contradict the assumption that practice exercises of the type herein employed would be effective in teaching punctuation and capitalization. But when one reflects upon the nature of the exercises he realizes that the psychological process underlying proof-reading and error correction exercises is different from that involved in writing one's own sentences free from errors. When proof-reading one has a mind-set for errors, he looks only for errors, and seldom gets the unified context of the matter he is proof-reading. In original writing the prime purpose is to express one's thoughts clearly, and punctuation and capitalization are used only as tools to facilitate the understanding of the author's thoughts. To determine the effect of teaching one psychological process by the use of another becomes the problem of this study. In some respects, therefore, the investigation becomes a study in transfer.

THE LITERATURE OF THE FIELD

Numerous error studies have been made on a wide range of materials and subjects. The prime purpose of these investigations was to determine the prevalence of punctuation, capitalization, and grammatical errors among elementary, junior and senior high school, and university students. A list of the most important ones is given in the bibliography at the close of this chapter. The chief findings

¹ Willing, Matthew H. "Valid Diagnosis in High School Composition." *Teachers College Contributions to Education*, No. 230. Teachers College, Columbia University, 1926. p. 64.

of them all, as they relate to this study, may be briefly summarized in the following conclusions:

- (a) Of all errors made punctuation errors were most numerous for every level from grade six to the upper classes in the university.
- (b) The range of errors is from two to five times as great in punctuation as in spelling and grammatical constructions.
- (c) Capitalization errors are almost as numerous as punctuation errors. Most of these mistakes in grade levels below the high school are made with capitals at the beginning of sentences.

A careful search has revealed no authoritative study in punctuation or capitalization in which an investigator, using the equivalent group method, endeavored to determine the superiority of any one method over another in teaching punctuation and capitalization. Miss Shepherd² studied the errors made on the papers of the children of the seventh grade in the University of Chicago High School. Her teaching unit consisted of a statement and illustration of the principle violated in a specific error. Assimilative exercises in using the principle were then given, and were followed by teaching tests and actual practice in writing compositions. After calculating a percentage of accuracy for each child, she concluded that such a group method of teaching was not effective except in a few cases.

With the coöperation of the other departments of the school, Miss Shepherd followed this with another study³ in which she endeavored to teach each pupil individually according to the mistakes he had made. This study seemed to indicate that seventh grade pupils were able to profit to a reasonable degree by well planned individualized instruction in matters of usage.

After a third attempt at individualized instruction, Miss Shepherd⁴ concluded that 45% of the children really learned to punctuate, and an additional 21% had almost given up the "lesson learning" point of view toward matters of usage.

² Shepherd, Edith E. "A Preliminary Experiment in Teaching English Usage." In *Studies in Secondary Education*, University of Chicago Supplementary Educational Monographs, No. 26, 1926, pp. 91-108.

³ Shepherd, Edith E. "An Experiment in Teaching Usage to Junior High School Pupils." *School Review*, Vol. 33, November 1925, pp. 675-684.

⁴ Shepherd, Edith E. "The Attitude of Junior High School Pupils Toward English Usage." *School Review*, Vol. 34, October 1926, pp. 574-586.

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By showing the enormous number of errors made in compositions from the third grade to the university, these studies have done much to point out the great need for more thorough teaching of punctuation and capitalization. They have also been helpful in emphasizing the relative importance of errors made in all matters of English form. Miss Shepherd's studies do much to cause us to realize the extreme difficulties which confront us when we endeavor to teach punctuation and capitalization. This alarming lack of ability to punctuate does not seem to be possessed by any one grade level or by any one section of the country, but is universal in its scope.

What methods, then, were being advocated to teach punctuation and capitalization by writers in the field and by authors of English textbooks? To determine what methods were being suggested to teach punctuation and capitalization, modern books on teaching English and textbooks in the subject were consulted.

METHODS OF TEACHING PUNCTUATION AND CAPITALIZATION

Numerous authors have suggested methods whereby pupils may be taught to punctuate and capitalize correctly. As teachers, we have set up formal details and have declared that pupils must master these rules of form before they can successfully do the work of the higher grades. But, doubtless, the fine distinctions in our rules which are so clear to the student of English are meaningless to the twelve and fifteen year old boy and girl. Let us examine some of the methods advocated by authors and others interested in the subject of English.

Sharp ⁵ says, "Dictation is a simple exercise, easily administered, which teachers of English usually do not use sufficiently. It possesses unquestioned values." He also says, "For errors in punctuation it is sometimes advisable to copy sentences on the board, but usually errors in punctuation may be disposed of by asking, 'How should this sentence be punctuated?'"

Goldwasser ⁶ also believes in dictation and proposes with considerable confidence the following methods: "Have children read correct sentences from books and state the rules for punctuation as a result of observation. Give them incorrect sentences and have them correct

⁵ Sharp, R. A. "Teaching English in High School." Riverside Educational Monographs, Houghton Mifflin Co., 1924. p. 85.

⁶ Goldwasser, Israel E. "Methods and Method in the Teaching of English." 1913. Chapter 13.

the punctuation or have the sentence contain no punctuation and ask the pupils to supply it." He suggests further that pupils be given correct sentences and be asked to describe the punctuation and capitalization and explain their usage. Also, they may be asked to form sentences of such a type as to illustrate the rule to be taught.

Goldwasser cites a specific example of what he believes to be an excellent method of teaching the apostrophe of possession. "Develop the idea of possession," he says. "Then write examples on the board and give the rule. Have the class point out the application of the rule to the sentences on the board. Then have the children write sentences, lifting the pencil between the noun and the apostrophe. This physical act is the outward sign of that pause in the thinking which is called for by the intelligent application of the rule. Needless to say, after a term or more of this formal drill the process of using the apostrophe will have become so completely automatic that the children will be able to write the entire word as a unit, and, when necessary, will insert the apostrophe."

In the words of Cross,⁷ "Punctuation cannot be learned by using a mark in a given situation a single time. It is over and over until what he knows as an intelligent fact has become a habit in his neurones." He suggests that pupils should punctuate groups of miscellaneous sentences assigned by the teacher, search books and magazines to see how closely they follow the rules for punctuation and capitalization, and note any departure from the rules.

In following out the psychological laws of practice, Cross says, "There should be practice in the correct use of punctuation and neglect of the use of the incorrect until new forms have become well established to take the place of the old. There should be frequent reviews at intervals even after the teacher feels that the new habits have become fixed and the old bonds have faded out." He points out the futility of teaching correct usage in the classroom and of doing nothing to prevent the pupils from lapsing into incorrect habits on the playground and at home.

Cross approaches nearer the psychological method of teaching punctuation and capitalization than any of the foregoing writers quoted, but he has made no attempt to conduct a controlled experiment to determine the effectiveness of his proposals in actual teaching situations.

⁷ Cross, E. A. "Fundamentals in English." Macmillan Co., 1926. Chapter 27.

"Details of form are best considered in situ when needs arise," is the opinion of Briggs.⁸ "However," he says, "to assure consideration of such matters as are considered necessary for all pupils, forms—spelling, punctuation, capitalization, and the like—should be systematically distributed throughout the course, a few taken at every lesson. The most fundamental matters of form should receive such thorough and repeated drill—in situ when possible—as to stamp them in thoroughly."

There seems to be no universal agreement as to how punctuation and capitalization may be best taught. No one has conducted a scientific investigation to determine the effectiveness of his proposals. Those proposals based on the psychology of practice are nearer the truth than those which seem to neglect the laws of habit formation.

The authors of textbooks differ even more widely than do the authors on methods. In the study made by Stormzand and O'Shea,⁹ the investigators examined carefully the contents of ten representative textbooks, ranging in date from 1877 to 1918, to determine the emphasis placed on certain essentials and methods. They report that the 1877 text they examined devoted 17% of its contents to learning by various types of practice exercises. These exercises increased in number until in 1918 the text examined devoted 51% of its contents to learning by this method. The later texts show a striking increase in the use of practice exercises of various types as means of teaching matters of English form.

The investigator examined twelve texts in English to determine the extent to which practice exercises were used in teaching matters of form in texts published since 1918. A list of the texts examined is given in the bibliography at the end of this chapter. The total content of these texts ranged from 250 to 484 pages. Of this total content three texts devoted less than 10% of their entire material to practice exercises—7% being the lowest. Six of them devoted over 20% of their contents to practice exercises, and only two of them devoted over 30% to learning by this type of materials. The highest percentage of practice exercises was 32%. By this examination the later texts do not seem to emphasize the practice exercises as much as did those of 1918 examined by Stormzand and O'Shea. It is

⁸ Briggs, Thomas H. "English in the Junior High School." *English Journal*, Vol. 9, October 1920, pp. 467-469.

⁹ Stormzand, Martin J. and O'Shea, M. V. "How Much English Grammar?" *Warwick and York*, 1924, pp. 194-213.

probable, however, that Stormzand and O'Shea counted more types of exercises than did the investigator, for he limited his count to only the three types of materials used in this study—proof-reading, error correction, and dictation exercises. The writers of English textbooks have shown a strong tendency toward using practice exercises of these three types upon the unproved assumption that they are effective in teaching children to punctuate and capitalize.

The astounding condition revealed by numerous error studies together with the diversity of opinion and methods advocated by writers of textbooks and books of methods bespeaks a need for a method which will really produce results in teaching punctuation and capitalization. These needs, together with the fact that no authoritative learning study with controlled groups to determine the effectiveness of certain methods of teaching punctuation and capitalization has been made, are in themselves sufficient justification for the present study.

With the foregoing facts before him, the investigator set out to determine the effect of applying the psychology of proof-reading and error correction to the teaching of punctuation and capitalization.

BIBLIOGRAPHY

ENGLISH TEXTS CONSULTED

Note—The first twelve texts listed are the ones used to determine the amount of space devoted to practice exercises.

1. Beveridge, John H., Ryan, Belle M., and Lewis, William D. "English for Use." Book III. The John C. Winston Co., 1926.
2. Bolenius, Emma Miller. "Advanced Lessons in Everyday English." American Book Co., 1921.
3. Buhlig, Rose. "Junior English." Book II. D. C. Heath Co., 1923.
4. Chapin, Charles S. and Arnold, Cornelia M. "Applied English." American Book Co., 1923.
5. Crawford, Douglas G. "The Study of English." The Macmillan Co., 1919.
6. Harvey, Emma Bates and Allen, Robert F. "The Mastery of English." The John C. Winston Co., 1925.
7. Knickerbocker, Edwin Van B., Clark, Donald L., and Veit, Benjamin. "Thinking, Speaking, and Writing." Silver, Burdett and Co., 1927.
8. Miller, William D. and Paul, Harry G. "Practical English." Book III. Lyons and Carnahan, 1925.
9. Murray, A. L. and Wiles, Ernest P. "A First Book in English." D. C. Heath and Co., 1925.
10. Spaulding, Frank E., Bryce, Catherine T., Buehler, Huber G., and Caverly, Ernest R. "Aldine Third Language Book." Newson and Co., 1926.
11. Tressler, J. C. "Grammar in Action." D. C. Heath Co., 1926.

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12. Ward, C. H. and Moffett, H. Y. "The Junior Highway to English." Scott, Forseman and Co., 1922.
13. Briggs, Thomas H., McKinney, Isabel, and Skeffington, Florence. "Junior High School English." Book II. Ginn and Co., 1926.
14. Canby, Henry Seidel and Opdycke, John Baker. "Grammar and Punctuation." The Macmillan Co., 1927.
15. Howe, Will D., O'Hair, Zella, and Pritchard, Myron T. "Gate to English." Longmans, Green and Co., 1917.
16. Ward, C. H. "Sentence and Theme." Scott, Forseman and Co., 1917.
17. Webster, W. F. and Cooley, Alice W. "The New Webster-Cooley Course in English." Second Book. Houghton Mifflin Co., 1909.

ERROR STUDIES IN ENGLISH

1. Betz, Annette and Marshall, Esther. "Written Errors of Children of the Third Grade of Kansas City." *The English Journal*, Vol. 5, September 1916, pp. 491-500.
2. Broom, M., Spelt, A., and Myers, G. C. "Speed vs. Accuracy in Language." *School and Society*, Vol. 8, December 7, 1918, pp. 687-690.
3. Charters, W. W. "Minimal Essentials in Elementary Language and Grammar." *The Sixteenth Yearbook of the National Society for the Study of Education*, Part I, 1917.
4. Charters, W. W. and Miller, Edith. "A Course of Study in Grammar." *University of Missouri Bulletin*, Education Series No. 9, 1915.
5. Diebel, Amelia and Sears, Isabel. "A Study of the Common Mistakes in Pupils' Written English." *Elementary School Journal*, November 1917, Vol. 18, pp. 172-185.
6. Diebel, Amelia and Sears, Isabel. "A Study of Common Mistakes in Pupils' Oral English." *Elementary School Journal*, Vol. 17, September 1916, pp. 44-54.
7. Guiler, W. S. "Diagnosing Student Shortcomings in English Compositions." *Journal of Educational Research*, Vol. 14, September 1926, pp. 112-119.
8. Johnson, Roy Ivan. "The Persistency of Errors in English Composition." *School Review*, Vol. 25, October 1917, pp. 555-580.
9. Leonard, S. A. "How English Teachers Correct Papers." *The English Journal*, Vol. 12, October 1923, pp. 517-532.
10. Lyman, R. L. "Fluency, Accuracy, and General Excellence in English Composition." *School Review*, Vol. 26, February 1918, pp. 85-100.
11. McGraw, H. W. "The Use of Test Data as a Basis for Drill in Grammar." *Journal of Educational Research*, Vol. 10, November 1924, pp. 291-296.
12. Pressey, S. L. "A Statistical Study of Usage and of Children's Errors in Capitalization." *The English Journal*, Vol. 13, December 1924, pp. 727-732.
13. Pressey, S. L. "A Statistical Study of Children's Errors in Sentence Structure." *The English Journal*, Vol. 14, September 1925, pp. 529-535.
14. Pressey, S. L. and Ruhlen, Helen. "A Statistical Study of Current Usage in Punctuation." *The English Journal*, Vol. 13, May 1924, pp. 325-331.

15. Shepherd, Edith E. "An Experiment in Teaching Usage to Junior High School Pupils." *School Review*, Vol. 33, November 1925, pp. 675-684.
16. Shepherd, Edith E. "Attitude of Junior High School Pupils Toward Usage." *School Review*, Vol. 34, October 1926, pp. 574-586.
17. Shepherd, Edith E. "Preliminary Experiment in Teaching English Usage." *Studies in Secondary Education*, University of Chicago Educational Monographs No. 26. 1926. pp. 91-108.
18. Stormzand, Martin J. and O'Shea, M. V. "How Much Grammar?" Warwick and York, 1924.
19. Sunne, Dagny. "The Effect of Locality on Language Errors." *Journal of Educational Research*, Vol. 8, October 1923, pp. 239-251.
20. Willing, Matthew H. "Valid Diagnosis in High School Composition." Teachers College, Columbia University, Contributions to Education No. 230, 1926. pp. 64.
21. Wiswall, Zilla E. "Improvement in Sentence Structure." *The English Journal*, Vol. 16, September 1927, pp. 518-527.

CHAPTER II

SUBJECTS, CONDITIONS, AND MATERIALS

THE PUPILS SELECTED

The original groups chosen for this study contained ninety-eight pupils taken from the eighth and ninth grades of the Ethical Culture School, New York City. Two sections representing about 70% of their grade enrollment were taken from each grade. In choosing the sections no basis of selection was used except that of convenience of administration. It probably would have made no difference which were chosen, inasmuch as the sections are not made up on the basis of intelligence or scores on any achievement tests. By virtue of their attendance at the Ethical Culture School the pupils were naturally somewhat selected. Raw scores on the Terman Group Intelligence test ranged from 89 to 196 for the eighth grade, and from 118 to 205 for the ninth grade. On the Pressey Diagnostic Tests in English Composition for Punctuation and Capitalization the median scores for both grades were above the standard norms for these grades. The pupils in the eighth grade had been given no intensive drill in the mechanics of composition, while those in the ninth grade had received only about one eighth grade semester's training.

TESTS AND CONDITIONS OF TESTING

All the pupils were given the following tests on a regular examination day for all pupils at the close of the first semester, January 26, 1928. They were given at one sitting with a ten minute intermission after each test and were administered by four teachers according to the printed directions accompanying them.

1. Terman Group Intelligence Test, Form A ¹
2. Pressey Diagnostic Tests in English Composition, Capitalization and Punctuation, Form 1 ²

¹ Terman Group Intelligence Tests, by L. M. Terman. Two forms, A and B. World Book Co., Yonkers-on-the-Hudson, N. Y.

² Pressey Diagnostic Tests in English Composition, Capitalization, Punctuation, Grammar, and Sentence Structure, by S. L. Pressey. Four forms, 1, 2, 3, 4. Public School Publishing Co., Bloomington, Ill.

3. Leonard Proof-reading Test, Form A

The Pressey Punctuation test is of a proof-reading nature and requires the correct application of twenty rules in thirty sentences; the Capitalization test is of the same nature and covers seven rules in twenty-eight sentences. The Leonard Proof-reading test, devised by the investigator, was constructed so as to measure the pupils' abilities in the use of twenty-eight marks of punctuation and capitalization. It was of a proof-reading nature, which means that the punctuation and capitalization were omitted from the sentences and the pupils were asked to supply them. Each pupil had a mimeographed copy of the test. Its construction will be described a little later in this chapter.

These tests were used for two purposes. First, pupils were paired into experimental and control groups on the basis of a composite score from the four tests. Secondly, the Pressey and Leonard tests were used as survey instruments to measure the pupils' abilities in punctuation and capitalization at the beginning of the experiment.

PAIRING THE PUPILS

It was decided to pair the pupils into an experimental and a control group for each grade level. The McCall technique,³ in which sigmas are made equal by a multiplier, was used to do this. In computing a composite of these four tests by this technique, one must first compute some measure of variability for each set of scores. In this case the standard deviation was used. A glance at these several deviations for each set of scores showed considerable variation. It had already been decided that each test was to receive equal weight, so the scores on these four tests for each group were taken, and some multiplier was chosen which would make the variability of their standard deviations equivalent. Each respective score in the set was then multiplied by the multiplier selected for that test. The test scores for each pupil were then added together to give each child a composite score for all four tests. This composite score was then treated as one score, and pupils were paired on the basis of this total score. The two Pressey tests, Punctuation and Capitalization, are so nearly alike that their scores may be added together at once without any special treatment. This was done. The composite score, then, is

³ McCall, William A. "How to Experiment in Education." Macmillan Company, 1926. pp. 51-55.

composed of the scores on all four tests, but only three sets of scores are used to compute the composite score—the Terman scores, the Leonard Proof-reading scores, and the combined scores on the two Pressey tests. This procedure weights the Terman test and the Leonard test as one, and the combined scores on the Pressey Capitalization and Punctuation tests as one.

Because there were not enough pupils to match exactly each pupil in the control group with one in the experimental group, the investigator endeavored to pair as many pupils as possible by means and sigmas. As a result of the pairings, sixteen of the pupils were eliminated, leaving eighty-two pupils from whom the data for this study were obtained. Of these eighty-two pupils forty-four were in the eighth grade, twenty-four in the control group, and twenty in the experimental. Thirty-eight pupils were in the ninth grade, sixteen in the control group, and twenty-one in the experimental.

Table 1 gives the results of the pairings and shows the means of the composite scores, the sigmas, and the number of pupils in each group.

TABLE 1
RESULTS OF PAIRING

GROUPS		N	MEANS OF THE COMPOSITE SCORES	SIGMAS
Experimental	9-3	21	374.52	36.82
Control	9-1	17	376.76	35.02
Experimental	8-1	20	369.00	49.24
Control	8-3	24	367.50	56.50

TESTS AT THE CLOSE OF THE EXPERIMENT

At the close of the eleven teaching periods the following tests were administered to all the pupils. These were given by the two teachers who had taught the classes throughout the experiment.

1. Pressey Diagnostic Tests in English Composition, Punctuation and Capitalization, Form 1
2. Leonard Proof-reading Test in Punctuation, Form A
3. An Error Correction Test
4. A Dictation Test

The Pressey and Leonard tests were the same as those given at the beginning of the experiment. The dictation test, given after the

Pressey and Leonard tests, was made up of material taken from a short talk by Mr. Herman Hagedorn. In order to maintain uniformity of procedure in so far as possible, the directions were mimeographed and were given as follows.

Pupils were told to listen to the reading of each sentence in its entirety before writing. The sentence was then re-read slowly, and the pupils were asked to write and punctuate it as they had been taught. After each sentence had been given in this manner, the entire material was re-read, and the pupils were told to make any changes they desired in their own writing. A complete set of directions with a copy of the test may be found in the appendices. Although the test was given in a regular forty-five minute period, difference in speed of writing caused some groups to write more words than others. Each of the pupils in the two eighth grade groups wrote 630 words, in the ninth grade control group 514 words, and in the ninth grade experimental group 428 words. As the results of the test are calculated on the basis of percentage of error, the number of errors divided by the number of opportunities, this variation in the number of words probably had no effect upon the results. The test was scored by an objective key made up by the investigator. The material in the key was punctuated according to the rules that had been taught throughout the experiment.

In the error correction test the investigator had in mind a different kind of measure. He used an excerpt from Robert Louis Stevenson's "Sire de Maletroit's Door," which contained approximately 1350 words and made opportunities for 231 possible corrections in punctuation and capitalization. Pupils were asked to draw crosses through the errors and to punctuate the material correctly. Opportunities were given to use all the twenty-eight rules of punctuation and capitalization taught but there was no uniformity in the number of times each rule was tested, except that no one was tested more than four times. The test was mimeographed and given to the pupils after the dictation test. It, too, was scored by a key prepared by the investigator on the basis of the rules taught. A copy of this test with the directions may be found in the appendices.

No claims are made for the validity, reliability, or value of this test. It has little weight in the results, but because the test was used in the study it is described here. The investigator does not make any

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claims for the validity or the reliability of the dictation test, but the results of both of these tests are of considerable interest.

CONSTRUCTING THE LEONARD PROOF-READING TEST

A survey test was needed at the beginning and at the end of the experiment to measure the pupils' knowledge of the twenty-eight rules to be taught. The test must measure all the rules frequently enough to make a reasonably reliable measure of the pupils' abilities with these marks. To the knowledge of the investigator no such test has been published. As a consequence, he set out to construct a test which would measure the pupils' abilities in all the rules taught in the experiment. This test has two parts: part I deals only with the testing of abilities in punctuation and capitalization; part II tests abilities in seven rules of grammar. Because the results of part II are not used anywhere in the study except in the calculation of the coefficient of reliability between forms A and B, part II will not be considered in the description here.

Before constructing the test the following principles were formulated to serve as a guide in its preparation.

1. The test should measure ability to proof-read sentences and to supply the necessary punctuation and capitalization. It should contain no error correction type of sentences.
2. The test should cover the twenty-eight rules of punctuation chosen for teaching.
3. Each rule should be illustrated four times in sentences; that is, each pupil should have four opportunities to use each mark correctly.
4. The rules chosen were to be those recommended for teaching junior high school English.
5. Each sentence was to illustrate clearly some one rule; no border-line cases were to be included.
6. The key was to be absolutely objective. No partial credits were to be given, and each mark of punctuation was either right or wrong. There were 157 opportunities for punctuation and capitalization, and the total score given represents the total number of correct responses.⁴

⁴ This method of scoring differs from that used in the Pressey test of Punctuation. Pressey used more than one mark in each sentence, but scored the test so that if any mark was incorrectly used the entire sentence was counted wrong. The total score represented the number of correct sentences.

7. Two forms, A and B, were to be prepared, and the Pearson coefficient of reliability was to be calculated between the two.

With the preceding principles before him, the investigator endeavored to construct a test to satisfy them. With the help of sixteen texts in English grammar and punctuation, listed at the end of chapter I, and several handbooks of English form, he made a list of forty possible rules of punctuation and capitalization. Obviously, there is no general agreement as to how many of these rules should be taught in the junior high school. Opinion here ranges from all of them to none of them. In order to get a selected judgment upon this list of rules, he made five copies of the list, and five judges were asked to check the rules they thought should be taught in the experiment. (A list of the texts examined may be found at the end of chapter I.) Two of the lists were checked by professors of education at Teachers College, Columbia University, one by a professor of English at Teachers College, another by the teacher of English at the Ethical Culture School who taught the ninth grade groups, and the fifth list was checked by an elementary school principal who had formerly been an English teacher. These lists, together with the one checked by the investigator, were used as the basis of selection of marks to be taught in the experiment.

A final list of twenty-eight rules was chosen, and the Leonard Proof-reading test was devised to measure pupils' abilities in the use of these rules. A copy of the test and a list of the rules may be found in the appendices. The judges were not unanimously agreed that all the rules should be taught in the progressive junior high school, but as the test was designed to measure the results of the teaching of punctuation and capitalization generally and not in a few of the most progressive schools, the investigator thought it best to include this number of rules, all of which are clear and definite.

The first draft of the test contained one-hundred-fifty sentences, but because so many sentences made the test cumbersome and tiresome by requiring more time to give, more time to score, an increase in the cost, besides tiring the pupils taking it, the number of sentences was decreased. As a result each rule was illustrated four times in fifty-one sentences, and pupils were required to apply several rules in one sentence rather than to use a sentence for each rule as was done at first. After four revisions the present form of the test was

adopted for use, and each point in the total score represented an error in applying some one rule.

The test was then mimeographed and given to the pupils as the experiment demanded. A second form of the test, made up in the same manner as the first, was constructed to measure the same abilities. At the end of the experiment, form A was given to all pupils, and on the following day form B was given to all pupils.

The author makes no claim that the test is an adequate measure of an individual pupil's ability to use punctuation and capitalization correctly in his compositions. Matthew H. Willing, in his dissertation on "Valid Diagnosis in High School Composition,"⁵ showed that the comprehensive proof-reading and error correction tests which he used were reasonably good instruments (average validity .68) for predicting the average number of formal errors that his pupils would make in 1200 words of diversified, classroom-written compositions on familiar subject matter. However, he says that these types of tests are "of very doubtful value in forecasting the specific kinds of errors individual pupils would make in their writings." The Leonard Proof-reading test is chiefly valuable as (a) a diagnostic survey instrument to give an idea of general strength or weakness of a group, and (b) to measure learning over short periods. As a minimum of errors on compositions is the ultimate goal of teaching punctuation and capitalization, the test must always be supplemented by a close examination of errors on compositions.

VALIDITY OF THE TEST

The entire test, parts I and II, was given to ninety-eight children on January 26, 1928. The Pearson coefficient of correlation was calculated between form A and three parts of the Pressey test which were given on the same day to the same pupils. Scores on the Pressey Diagnostic tests in English Composition for Capitalization, Punctuation, and Grammar were added together to form a combined score for these three parts of the Pressey test. The results of this correlation are as follows:

Correlation between Leonard Proof-reading Test and three forms of the Pressey Diagnostic tests was $.885 \pm .0134$. S. D. Pressey 10.30; S. D. Leonard 27.85; $N = 96$.

⁵ Willing, Matthew H. "Valid Diagnosis in High School Composition." *Teachers College Contributions to Education*, No. 230. Teachers College, Columbia University, 1926, pp. 33-34.

Another measure of validity was used. The Pearson coefficient of correlation was computed between the percentage of error made by an individual pupil on his five total compositions written before the teaching periods and the number of errors he made on form A of the Leonard Proof-reading test. The results of this correlation are as follows:

Correlation between form A of the Leonard Proof-reading Test and percentage of error made on a total of five compositions written before the experimental teaching was $.675 \pm .0405$. S. D. Leonard Test 18.70; S. D. Percentage of Error on Compositions 4.19; $N = 82$.

These were the only measures of validity available. Teachers' marks for these pupils were given on ability in grammar, composition, and literature. Hence, one mark based on these three abilities would not be valuable for use to determine the validity of the test in punctuation, capitalization, and grammar.

RELIABILITY OF THE TEST

Form A of the test was given at the close of the experiment to all groups. The following day form B was given to the same pupils. The Pearson coefficient of reliability was then calculated between the two and the results were as follows:

Correlation between form A and form B of the Leonard Proof-reading Test was $.818 \pm .0225$. S. D. form A 19.40; S. D. form B 20.35; $N = 96$.

No attempt was made to scale the test on the basis of difficulty. Sentence number one is not the easiest, nor is sentence number fifty-one the most difficult. Furthermore, all sentences in the test are not of equal difficulty. For instance, it is more difficult to determine the use of a comma with a non-restrictive clause than to determine the use of a terminal period. It is difficult to determine whether it is harder to use a comma with appositives than with series. The investigator does not know of any satisfactory way to do it, nor does he believe that it needs to be done in such a test. The investigator analyzed several composition scales and found that pupils did not make use of colons, semi-colons, and fine distinctive uses of the comma until they had learned the use of terminal marks and the more common uses of the comma. He thinks it better to say that sentences from one to three test commas with appositives, and sentences from four to six test commas with non-restrictive clauses, than to attempt to say that

the sentences increase evenly with difficulty from one to fifty-one. He considers it desirable, also, to include several rules in one sentence. Too many sentences are cumbersome, and we do not write sentences in terms of single rules, as most of our sentences contain the application of many rules.

THE COMPOSITIONS

At the beginning of the experiment, each pupil handed in five original compositions written expressly for the examiner. They were written on the following five assignments: "My Summer Vacation," "My Most Thrilling Experience," a social letter, a "question" letter, and the review of a book or play.

A word of explanation probably needs to be said about the question letter. Wishing to make sure that each pupil would have an opportunity to use question marks, proper nouns, and some quotation marks, the investigator decided to arrange a situation in which pupils would be required to use such marks in legitimate ways. The children were asked to write a letter according to the following directions which were read to them by the teacher:

"Imagine that a friend has asked you a question which you cannot answer. Write me a clear, complete, and definite letter, heading it as though you were at your parent's home. Address it to me at the Ethical Culture School. Begin it by saying, 'A friend recently asked me this question'; then state the question in the exact words the friend used. Tell me who your friend is and why he is interested in the answer to the question; and, in the question form, ask me if I will answer it for you. Use the form you think best suited to such a letter. Sign your name in full."

The directions for the rest of the letters are not given here, but they may be found in the appendices.

Each composition was written during a regular forty-five minute class period, and the writing of each letter required twenty minutes. The pupils were told to use the best form and punctuation they knew how to use, and were allowed a few minutes at the close of the period to look over their work.

At the close of the experiment each pupil again wrote five compositions. The procedure was the same as that used at the beginning. The assignments this time were: "A Trip I Have Made" (compositions on trips to foreign countries required the use of many proper nouns), a book review or a written lesson in some subject, a social letter, a business letter ordering a list of athletic supplies for the

school, and a reproduction of "The Andersons' Trip Westward." The directions for all these compositions may be found in the appendices.

Special mention needs to be made of the Anderson dictation, which was based on an anecdote read to the class by the teacher. It took twelve minutes to read the story, and the pupils were then given twenty-five minutes in which to reproduce as much of the story as they could remember. It contained several characters, a good many questions, and considerable conversation. The pupils were requested to reproduce the story as nearly as possible in the form in which it was read.

At the beginning of the experiment all children wrote 82,845 words in their compositions; at the end they wrote 90,136 words. A total of 172,981 words written by eighty-two children in original compositions and letters were analyzed for errors. The ability to correctly punctuate and capitalize in these compositions constitutes the measure of pupils' composition ability employed in this study. The investigator believes that the number of compositions used was sufficiently large to make the results reliable.

Table 2 shows the average number of words written by each child on each subject before and after the experiment, together with the totals by groups.

TABLE 2
NUMBER OF WORDS IN THE COMPOSITIONS

COMPOSITION SUBJECT	BEGINNING OF THE EXPERIMENT	
	AVERAGE NUMBER OF WORDS PER CHILD	TOTAL NUMBER OF WORDS
"My Most Thrilling Experience".....	390	23,693
"Written Lesson Report"	212	17,404
"Question Letter"	100	8,213
"My Summer Vacation"	307	24,822
"Social Letter"	142	8,713
Total number of words for all children.....		82,845
COMPOSITION SUBJECT	END OF THE EXPERIMENT	
	AVERAGE NUMBER OF WORDS PER CHILD	TOTAL NUMBER OF WORDS
"Book Review"	212	17,098
"Business Letter"	59	4,855
"Social Letter"	158	12,935
"A Trip"	306	24,770
"Anderson Dictation"	283	30,478
Total number of words for all children.....		90,136
Grand Total Number of Words Counted at Beginning and End		172,981

EFFORTS FOR UNIFORMITY

Special efforts were made to keep the conditions uniform in all the classes. Since the purpose of the study was to measure as accurately as possible the amount of improvement made with this special method of work in the exact time and in the exact amount of practice allotted, each teacher was requested to pay no attention to punctuation and capitalization in her regular classroom work at periods other than those of the experiment. An excellent spirit of co-operation insured the compliance with this request. The investigator believes that there was very little, if any, practice done at home, as the practice sheets were collected from the pupils at the end of each period.

Each set of directions, explanations of marks, and practice exercises, both to teachers and to pupils, was carefully mimeographed and teachers were charged explicitly with carrying out the directions.

It was made administratively possible for the same teacher to teach both the experimental and the control groups in the ninth grade, and the investigator taught both groups in the eighth grade. Daily conferences on each lesson and frequent visits to the classroom assured the investigator that conditions were as uniform throughout all classes as it was possible to make them.

The pupils were very much interested in the practice exercises. They were curious to know the reasons for the changes in teachers and in methods of teaching. The investigator felt that the children would do better work if they knew the purpose of the experiment. So in order to secure a spirit of coöperation on the part of the pupils and to make conditions as uniform as possible, the examiner told the children why the experiment was being conducted. Their curiosity was immediately satisfied and an excellent spirit of coöperation was in evidence all throughout the experiment.

CHAPTER III

SCORING THE COMPOSITIONS AND TESTS

There is no general agreement among students of English as to what constitutes an error. One writer contends that "It is me" is correct; another declares it to be illiterate. As a controversy of this nature is not the concern here, the investigator hoped to keep out of it by choosing only marks of punctuation and capitalization upon which there was universal agreement as to their usage. Obviously, this could not be done in a study containing twenty-eight marks. In fact, it seems that the only rule upon which there is unified agreement is that a comma should be used to set off non-restrictive clauses in a sentence.

Since the chance of errors entering into the scoring of children's compositions increases proportionately with the number of details considered, it was necessary at the outset to limit the field to a more intensive study of fewer items. The method used in determining these twenty-eight marks of capitalization and punctuation has already been described in chapter II. The object in reducing the number of rules to count from twenty-eight to eleven was to select the marks which the pupils used most frequently and which were obvious enough to be recognized immediately as the same errors whenever and wherever they were found. For instance, conditions will probably affect a teacher's decision on restrictive and non-restrictive clauses far more often than it will that of the capitalization of a proper noun.

THE ERROR GUIDE

It was necessary to devise a plan whereby all the compositions might be scored uniformly. This was done by preparing an error guide. First, all of the twenty-eight rules were listed by number. Then for each rule, the author tried to list as many possibilities for errors with the rule as he could think of; for instance, capital with common noun, semi-colon for a comma, etc. The final list contained sixty-eight separate items or possibilities, with one section for miscellaneous freak usages. Each possibility of violation or omis-

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sion of the rule was given a number which was to be used in scoring the compositions.

One hundred twenty-five compositions were scored by the use of this first error guide in order to find the errors made most frequently. A tabulation of these errors by kind showed that between fifty and sixty of the classifications were used so rarely that it did not seem worth while to consider them. Consequently, the investigator decided to choose the ten errors having the greatest frequency in the 125 papers scored and to disregard all others in the study. As there was a tie between two marks, eleven were finally chosen. It was found possible by careful work to score the compositions very objectively by this shortened error guide. The first or long error guide may be found among the appendices; the short one is given on the next page.

There is practically universal agreement on all of the eleven marks contained in the shortened error guide save one—the use of the comma before “and” in a series. Obviously this rule could not be taught as optional and measured objectively; therefore, as the investigator was forced to rely upon his judgment, he chose to teach the pupils to use the comma with “and” in a series. Hence all the pupils were taught in this manner.

The following eleven details were used for the shortened error guide:

1. A period shall be used at the end of declarative and imperative sentences.
2. The first word of each sentence shall be capitalized.
3. All proper nouns must be capitalized.
4. Common nouns must not be capitalized.
5. Interrogative sentences end with a question mark.
6. Words, phrases, and clauses in series shall be separated by commas.
7. A comma shall be placed before “and” when used in a series.
8. Commas shall be used to set off such words as “also, nevertheless, namely, therefore, however,” etc., when used parenthetically.
9. Commas shall be used to set off phrases and clauses when used parenthetically.
10. The apostrophe shall be used with contractions to mark the omission of letters.
11. The apostrophe shall be used to indicate the possessive of nouns. (This rule as stated covers the use of the apostrophe, with both singular and plural nouns. It naturally involves the understanding of several other rules which were given in the teaching material.)

SCORING THE COMPOSITIONS AND TESTS

Scoring for all of the 820 compositions written was done by this shortened error guide during the summer of 1928. The papers were scored as to (a) the number of opportunities to use the various items of punctuation and capitalization listed on the shortened error guide, (b) the number of cases in which the mark was used incorrectly, and (c) the number of times the mark was omitted. Incorrect and omitted marks were then added together for each rule and represent what is called errors in the study. The percentage of error for each pupil was then obtained by dividing the number of errors by the number of opportunities for committing the error.

The author is conscious of the fact that this method does not account for any differences between misused punctuation and capitalization, which may be due to ignorance, and omitted marks, which may be due to carelessness. However, as the aim of English teachers is to eliminate both types of errors, and the present study seeks to determine the effectiveness of practice exercises in doing this, the method employed seemed to be as good as any other. Also, we are not justified in assuming that every omitted mark is an indication of carelessness and not of ignorance. Any method of scoring which sought to differentiate between the two on the foregoing assumption would probably be less sound than the one employed. By calculating a percentage of error for each child according to the above plan, all the errors were made comparable, and made a far more reliable and objective basis of comparison than any other scheme known to the investigator.

The Terman Group Intelligence tests and the Pressey Diagnostic tests were scored according to the keys supplied by the authors. The score on the Leonard Proof-reading test represented all the correct uses of the marks involved, and each point in the total score represented a right choice of the mark made by the pupil. All the Leonard Proof-reading tests were scored by this key. There was a possible score of 157 on the test.

CHAPTER IV

LESSON MATERIAL AND METHODS OF TEACHING

The reader is already familiar with the method used in choosing the twenty-eight rules which formed the content of the course in punctuation and capitalization used in this study. Had the original plan been to use only the eleven rules on the shortened error guide, the choice of teaching material would doubtless have been different. Less material might have been chosen, and more intensive drill given on these fewer rules. The difficulty of using the original error guide, however, was not foreseen until actual counting of errors on compositions had been done.

Once the content of a course of study has been determined, one is faced with the problem of method, manner of presentation, and differentiation in procedures between the control and experimental groups. If the experiment is to be of value and of practical significance, one group cannot be slighted and the other one drilled intensively. On the contrary, conditions must be uniform and fair for both. One of the most difficult problems of the study was to teach both groups the same material in such a way that one was to have intensive drill on practice material while the other had a fair opportunity to learn punctuation and capitalization by more conventional methods generally used by English teachers. All of the teaching material for both groups must be comprehensible, clear, and sufficiently motivated to insure interest. In order to make the teaching material satisfy these demands, the investigator found it necessary to spend from three to eight hours on the preparation of each lesson.

PREPARATION OF THE LESSON MATERIAL

At the outset, a set of principles was formulated to guide the investigator in planning his teaching material. The following principles and rules were set up and were followed in the preparation of the lesson material and in its presentation to the groups.

1. The twenty-eight rules were to be taught in ten forty-five minute periods.
2. Short practice tests of the proof-reading type, made by the examiner,

were to be given to the experimental groups at the end of the third, sixth, and eleventh lessons. Tests requiring sample sentences for rules were to be given to the control groups.

3. The lessons were to be given on alternate days for two days each week. The practice periods were to be divided into three periods of ten minutes each.
4. No border-line cases were to be used. Each mark taught was to have a clear reason for its usage.
5. No two marks which might require a highly specialized ability for one to be able to differentiate between their uses were to be taught in the same lesson.
6. The number of marks taught each day as well as the amount of practice materials on each day was to vary in proportion to the difficulty of the mark.
7. Each pupil was to be permitted to keep all of the lesson explanations, but the practice sheets were to be collected at the end of each practice period.
8. The terminology "rule" was not to be used in the entire teaching material, but each rule was to be clearly stated in a sentence at the end of the daily lesson, the term "rule" being replaced by the words "Always Remember That—."
9. Pupils in the experimental groups were made conscious of their own errors each day by correcting their papers as the teacher read the correct punctuation at the close of the practice period. Those in the control group were to discuss their errors in class.
10. Each lesson was to contain two parts. Part I was to be the same for both groups and was to contain a brief review of the previous rules taught, an explanation of the rules of punctuation and capitalization to be taught for the day, a demonstration of their correct usage in a sentence, and a summary of these explanations at the end.

Part II was to be different for the experimental and control groups. For the experimental group it was to contain practice materials of three kinds—proof-reading, error correction, and dictation exercises. These types of practice exercises were to remain constant throughout the teaching periods. Part II for the control group was to contain methods whereby the pupils might have opportunities to apply the rules learned by some methods other than practice exercises.

11. The practice exercises were to provide for repetitions under conditions of specific focalization on each habit to be formed.
12. Through the use of dictation the teacher was to approximate conditions under which the specific habit was to be used.
13. The exercises were not to be too difficult, but were to be of sufficient difficulty to afford a challenge to the pupils.
14. Each explanation was to be so clear that there would be no opportunity for misunderstanding its intent.
15. Practice was to be given on each specific mark before a series of habits were required for correct responses.

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16. After every second lesson several exercises were to be given which would require the use of all the marks previously studied.
17. The exercises were to be motivated by two methods: first, by creating a sense of pride in being able to punctuate correctly; and secondly, by supplying exercises interesting within themselves. Each child was to be conscious of his own errors. Interesting material was to be supplied by the use of fables and stories in so far as possible, rather than by sentences meaningless to the child. Various types of sentences relieved the monotony.
18. An attempt was to be made to keep children from committing errors by making the occurrence of errors annoying. Pupils with correct punctuation were to be praised. Pupils with low scores on the practice exercises were to receive more individual attention of the teacher during class.
19. Pupils were to be constantly reminded that the tests at the end of the experiment were to contain the same types of exercises as the practice materials, and that these were to be supplemented by compositions. They were also to be admonished to use the marks correctly in all of their daily work for all other subjects in the school.
20. In addition to the reviews after every few lessons on the marks previously learned, and the tests after every third, sixth, and eleventh lessons, a general review showing all of the usages taught with a correct example of the use of each in a sentence was to be given at the end of the eleventh lesson.

This made fourteen forty-five minute periods (including tests and reviews) which were devoted to the experiment exclusive of the time consumed in writing the compositions and taking the beginning and ending tests. In all, twenty-eight forty-five minute periods were devoted to the experiment.

METHODS OF TEACHING THE GROUPS

After each lesson had been carefully prepared, it was mimeographed and made ready for use in teaching. A copy of one of the lessons for both groups may be found among the appendices. At the beginning of each class, copies of parts I and II were given to each pupil in the experimental groups. Pupils in the control groups received only part I. Each child in both groups was told to read part I very carefully and to ask any questions which would clarify the lesson for him. It took usually about five minutes to read part I. If questions were forthcoming they were immediately answered; if none arose the teacher asked enough questions to make certain that the lesson was understood. To this point the experimental and control groups fared alike; thereafter they differed in method.

THE EXPERIMENTAL GROUPS

Part II, attached to each lesson given to the pupils in the experimental groups, contained as many practice exercises as the pupils could do in twenty minutes. The dictation material was not attached to the lesson given to the pupil. The practice materials for each lesson were of three kinds. First, there were twenty sentences of the proof-reading type where punctuation and capitalization had been omitted, and the pupil was required to recognize the need of the marks. Secondly, there were twenty sentences of the error correction type where sentences were incorrectly punctuated, and the pupils were required to punctuate them correctly. Each day the first two-thirds of the exercises were so arranged as to require an application of only the rules learned that day; the other one-third required an application of all the rules learned to date. This served as a daily review. These exercises were sometimes single sentences, sometimes short bits of interesting experiences from literature, short news items, and fables. Thirdly, from five to seven sentences were dictated by the teacher. The pupils were asked to write and to punctuate these sentences correctly. Following these exercises the teacher read the correct punctuation for all materials practiced upon for the day, and each pupil corrected his own mistakes. Five minutes were then given in which pupils might ask questions about the mistakes they had made. In brief, the order pursued and the time allotted were as follows:

Reading of mimeographed lesson material.....	5 minutes
Questioning on any uncertain point in the lesson material.....	5 minutes
Doing of proof-reading exercises by pupils.....	10 minutes
Doing of error correction exercises by pupils.....	10 minutes
Doing of dictation exercises by pupils.....	5 minutes
Correcting own mistakes.....	5 minutes
Questions on errors.....	5 minutes
Total time spent.....	45 minutes

This order was carried out in each experimental class in both grades for each day throughout all the teaching periods. This procedure was constant throughout and did not vary from day to day. One of the distinguishing points of difference between this procedure and the one used in the control groups was that no one type of exercise was followed rigidly in the control groups as was done in the experimental groups.

THE CONTROL GROUPS

As has been stated, the control groups received the same mimeographed lesson sheets, part I, as the experimental groups. The pupils in the control groups were likewise asked to read the material carefully and to ask questions about doubtful points. The teacher then gave numerous sentences in explanation of the rules to be studied for the day, and called for sentences orally from the pupils. The procedure was then varied from day to day, no one type of exercise being stressed more than another. The daily type of exercise used instead of the practice materials was chosen from the following list, of procedures. All these procedures were used at least once during the course of the experiment.

1. Picking out from textbooks sentences illustrating the correct uses of the rules under discussion.
2. Pupils were asked to write sentences illustrating the correct use of the rule discussed.
3. The teacher gave oral sentences and called for correct punctuation. Example—"America's attitude toward Mexico has been criticized." Teacher—"Where should the apostrophe be placed?"
4. A list of sentences was read and pupils were asked to put down on paper the word in the sentence they thought should be capitalized.
5. Letters and compositions were written in which pupils were told to apply the rules correctly.
6. A short paragraph was put on the board and pupils were asked to tell why each punctuation mark was used.
7. A Hindu Tale called "The Brahmin and the Tiger" was mimeographed, and pupils were asked to discuss in class with the teacher the marks used and the rules covered.
8. Pupils were asked to write letters to friends who were going to Europe and to list the places the friend should visit. This exercise gave opportunities for the use of commas with series, proper nouns, abbreviations, terminal and beginning marks.
9. Pupils were asked to list the marks studied and to illustrate their correct use in sentences.
10. Words, phrases, and clauses were given, and pupils were asked to use them correctly in sentences.
11. Sentences showing various uses of the comma were given, and pupils were required to tell why the commas were used in each instance.
12. Pupils were asked to write imaginary street and subway conversations. They also wrote reviews of plays and books as if they were writing them for a newspaper or magazine.

All of these various procedures are being used in teaching punctuation and capitalization, but the material is obviously quite varied and wide in scope. After each written lesson the teacher looked over the material written, and at the beginning of the next class period discussed the errors with the pupils.

CHAPTER V

THE RESULTS

THE TESTS

The reader must remember in interpreting the data that the Leonard Proof-reading test and the error correction test covered all the twenty-eight rules taught during the experiment; while the Pressey tests covered only about two-thirds of these rules, and the dictation test covered the eleven rules in the shortened error guide.

This seeming inconsistency in the use of tests to measure different numbers of rules was necessary. As the investigator wished to make more accurate his results on the compositions by limiting the errors to be counted to a small number, he chose to count only the errors on eleven rules. However, he sought a measure on more than eleven rules. While it seems reasonable to say that whatever results were true for the eleven rules would probably be true for all the twenty-eight rules taught, yet objective evidence to substantiate the claim would be more scientific. So in order to insure greater accuracy in the composition results and at the same time to make the scope of the investigation as wide and as accurate as possible, the pupils were given opportunities to use all the twenty-eight rules on the various tests.

The results of the tests are shown in table 3. Table 4 shows the gains in means on the tests.

Results on the dictation test, given only at the end of the experiment, were calculated in terms of percentage of error. Table 5 shows the results obtained with this test.

In analyzing the test data one is immediately struck by the general trend of the results in favor of the practice groups. On the Leonard Proof-reading tests, both the control and the experimental groups in each grade made large mean gains ranging from 14.12 points to 34.50 points. The ninth grade experimental group made a mean gain of 20.10 points, an increase of almost an 18% gain in mean score as a result of eleven lessons of the practice exercises. In the eighth grade experimental group an increase of 34.50 points

TABLE 3
MEAN SCORES AND SIGMAS ON THE TESTS

GROUPS	LEONARD PROOF-READING TEST PUNCTUATION		PRESSEY PUNCTUATION TEST		PRESSEY CAPITALIZATION TEST		CORRECTION OF ERROR TEST
	Beg.	End	Beg.	End	Beg.	End	End
Mean Scores							
Experimental 9-3 ...	114.88	134.98	17.38	22.02	22.57	25.07	116.43
Sigmas							
Experimental 9-3 ...	13.06	9.08	4.12	2.77	4.00	1.76	23.16
Mean Scores							
Control 9-1	116.62	130.74	17.82	22.21	22.41	25.38	124.41
Sigmas							
Control 9-1	14.57	9.99	3.43	2.32	4.38	1.37	21.82
Mean Scores							
Experimental 8-1 ...	96.50	131.00	14.10	21.30	22.50	26.70	127.00
Sigmas							
Experimental 8-1 ...	21.97	12.45	4.26	2.96	2.96	1.47	25.52
Mean Scores							
Control 8-3	94.37	117.92	14.79	19.25	21.17	23.92	162.50
Sigmas							
Control 8-3	22.26	15.65	4.77	3.78	2.96	2.71	29.62

Note—With the exception of the correction of error test, all the above scores represent the number of correct responses. The score on the correction of error test represents the number of errors made; hence with this test only, the low score is the best one.

TABLE 4
GAINS IN MEANS

TESTS	ACTUAL GAINS NINTH GRADE		DIFFERENCE IN FAVOR OF EXPERIMENTAL GROUPS	ACTUAL GAINS EIGHTH GRADE		DIFFERENCE IN FAVOR OF EXPERIMENTAL GROUPS
	Exp. Group	Cont. Group		Exp. Group	Cont. Group	
Leonard Proof-reading Test ...	20.10	14.12	5.98	34.50	23.55	10.95
Pressey Punctuation Test	4.64	4.39	.25	7.20	4.46	2.74
Pressey Capitalization Test	2.50	2.97	— .47	4.20	2.75	1.45
Correction of Error Test			7.98			35.50

represented a 36% gain. A corresponding gain is also in evidence in the results of the eighth grade experimental group on the Pressey Punctuation test. Here a gain of 7.20 mean points represented a 51% increase in the mean score. In no other test is the gain so

TABLE 5
RESULTS OF DICTATION TEST

GROUPS		TOTAL NO. OF OPPORTUNITIES FOR ERRORS	TOTAL NO. OF ERRORS	PERCENTAGE OF ERRORS
Experimental	9-3	3633	185	5.09
Control	9-1	4063	277	6.82
Experimental	8-1	4360	404	9.27
Control	8-3	5232	648	12.39

Note—The total number of opportunities was obtained by multiplying the number of opportunities on one test by the number of pupils in the group.

evident except in the results of the error correction test for the eighth grade experimental group. Here a mean gain of 35.50 points in favor of the experimental group represented a 28% increase in accuracy in excess of the control group.

The following formula was applied to the results of the Leonard Proof-reading test to determine the standard deviation of the difference between the two means for each grade level.

$$S.D._{diff.} = \sqrt{\frac{(S.D._1)^2}{N} + \frac{(S.D._2)^2}{N}}$$

On this test there is a difference of 5.98 mean points ($S.D._{diff.} = 3.017$) in favor of the practice group between the mean gains of the control and the experimental groups in the ninth grade. This actual mean difference is 1.98 times its own $S.D._{diff.}$, which proves to be a fairly significant difference in favor of the experimental group.

In the eighth grade the difference is even greater in favor of the experimental group. Here the mean difference in gains of the two groups was 10.95 points ($S.D._{diff.} = 4.465$) in favor of the practice group. This actual mean difference is 2.46 times its own $S.D._{diff.}$, which is a highly significant difference. The practice exercises had a decided effect in raising the scores on the Leonard Proof-reading test in punctuation for both grade levels.

The results on the Pressey Punctuation test in the ninth grade show a difference of only .25 mean points ($S.D._{diff.} = .834$) in favor of the experimental group. This mean difference is only .30 times its own $S.D._{diff.}$ and is not high enough to be significant. The results of this test in the eighth grade show a mean difference of 2.74 mean points ($S.D._{diff.} = 1.011$) in favor of the experimental group. This difference is 2.75 times its own $S.D._{diff.}$ and shows a significant difference in favor of the practice exercises.

The results on the Pressey Capitalization test for the ninth grade show that the control group actually excelled the experimental group by .47 mean points ($S.D._{diff.} = .519$). This difference is .91 times its own $S.D._{diff.}$ and is not high enough to be significant. The results of this test in the eighth grade show a difference of 1.45 mean points in favor of the experimental group ($S.D._{diff.} = .941$). This difference, 1.54 times its own $S.D._{diff.}$, is not high enough to be significant, but it is in favor of the practice exercises.

The results on the correction of error test also point in the same direction. The mean number of errors made by the control group in excess of the experimental group in the ninth grade was 7.98, and 35.50 in the eighth grade. The author has already stated that he made no claims for this test; therefore no other statistical measures were applied to these results. However, it is interesting to note that the results on this test were in the same direction for both grade levels as the results on the more reliable and valid tests.

The results of the dictation test based on the eleven errors of the shortened error guide are in terms of percentages of errors, the number of errors divided by the number of opportunities for committing the errors. Here the results point in the same direction—in favor of the practice groups. As is shown by the test at the end of the teaching periods, the only time this test was given, the experimental group in the ninth grade made 1.73% less errors than did the control group in the same grade; while in the eighth grade, the experimental group made 3.12% less errors.

The results of these tests show that the differences between every test, except the Pressey Capitalization in the ninth grade, were in favor of the experimental groups. Or in other words, the practice exercises so improved the ability of these pupils to punctuate that these differences were evident in tests of three types—proof-reading, error correction, and dictation.

THE COMPOSITIONS

In all, 820 compositions were written, representing a total of 172,981 words for all pupils. These were all scored by the use of the shortened error guide. The number of opportunities and the number of errors were recorded for each mark of punctuation, and a percentage of error was calculated for each pupil by dividing the total number of errors of each pupil by his total number of opportunities for committing errors. The reader must keep in mind that the results on the compositions are only on eleven marks of punctuation. Table 6 shows the combined results on all compositions for all children.

TABLE 6
RESULTS ON ALL COMPOSITIONS FOR ALL CHILDREN

GROUPS	COMPOSITIONS AT THE BEGINNING			COMPOSITIONS AT THE END		
	Opp.	Error	Avg. Percentage of Error	Opp.	Error	Avg. Percentage of Error
Experimental 9-3	6143	499	8.12	9903	231	2.33
Control 9-1	6240	389	6.23	8893	307	3.45
Experimental 8-1	8425	815	9.67	8413	239	2.84
Control 8-3	7755	735	9.48	8265	496	6.00

Tables 7, 8, 9 and 10 show the results on all compositions for each pupil.

Before the teaching, the percentage of error for all eleven details on the compositions ranged from 3.53% to 15.73% for the ninth grade experimental group. After the teaching, this range of percentage of error was from .56% to 5.40%, or an average decrease in range of errors of 7.36%. Before the teaching, five or one-fourth of the pupils made above 10% errors, and 18 or about six-sevenths of them made errors above 5.40%, the highest percentage made after teaching. After the teaching, only five or one-fourth of the pupils made errors above 3.53%, the lowest percentage at the beginning. The mean percentage of errors for the middle fifty percent of the ninth grade experimental group at the beginning was 8.59%; after the teaching this percentage fell to 2.09%. This represents a mean decrease in error of 6.50% for the middle fifty percent of the pupils in the group.

In the ninth grade control group the percentage of error for all eleven details on the compositions ranged from 2.02% to 10.08%. After the teaching, this range of percentage of error was from .87% to 6.87%, or a decrease in range of errors of 2.06%. This range is

TABLE 7

RESULTS ON ALL COMPOSITIONS FOR NINTH GRADE EXPERIMENTAL GROUP

PUPIL'S NUMBER	COMPOSITIONS WRITTEN AT THE BEGINNING			COMPOSITIONS WRITTEN AT THE END		
	Number Oppor.	Number Errors	Percentage of Error	Number Oppor.	Number Errors	Percentage of Error
1	334	20	5.99	487	19	3.90
2	443	31	7.00	434	9	2.07
3	325	25	7.69	553	10	1.81
4	177	14	7.91	405	7	1.73
5	328	18	5.49	341	9	2.64
6	301	44	14.62	753	17	2.26
7	321	34	10.59	348	15	4.31
8	154	15	9.74	384	10	2.60
9	353	35	9.92	478	10	2.09
10	417	17	4.08	360	2	.56
11	331	33	9.97	703	38	5.40
12	175	19	10.86	459	7	1.52
13	286	45	15.73	301	16	5.32
14	98	9	9.18	432	8	1.85
15	301	21	6.98	319	6	1.88
16	138	13	9.42	596	5	.84
17	425	15	3.53	701	6	.86
18	227	11	4.84	412	3	.73
19	480	24	5.00	512	10	1.95
20	202	21	10.40	429	17	3.96
21	307	25	8.14	402	7	1.74
Mean Percentage of Error						2.26
Sigma						1.48

still greater by 5.30% than that of the experimental group for the same grade. Before the teaching, five or almost one-third of the pupils made above 8% errors, and 10 or about two-thirds of them made above 6.87%, the highest percentage made after teaching. Sixteen or all but one of the pupils made above 2.02% after the teaching, the lowest percentage at the beginning; and only 7 pupils or about one-third of them made above 5% of errors. The mean percentage of errors for the middle fifty percent of this group before the teaching was 7.09%; after the teaching the percentage

dropped to 4.26%. This represents a mean decrease in error of only 2.83% for the control group in comparison with a mean decrease in error of 6.50% for the experimental group of the same grade. It is significant to note that the mean of the middle fifty percent of the

TABLE 8
RESULTS ON ALL COMPOSITIONS FOR NINTH GRADE CONTROL GROUP

PUPIL'S NUMBER	COMPOSITIONS WRITTEN AT THE BEGINNING			COMPOSITIONS WRITTEN AT THE END		
	Number Oppor.	Number Errors	Percentage of Error	Number Oppor.	Number Errors	Percentage of Error
1	262	22	8.40	445	29	6.52
2	337	12	3.56	419	9	2.15
3	234	14	5.98	556	29	5.22
4	385	34	8.83	359	18	5.01
5	578	41	7.09	378	19	5.03
6	372	19	5.11	408	10	2.45
7	318	25	7.86	315	15	4.76
8	297	6	2.02	520	11	2.12
9	248	25	10.08	419	22	5.25
10	221	15	6.79	348	12	3.45
11	372	27	7.26	530	27	5.09
12	258	22	8.53	351	11	3.13
13	581	44	7.57	655	45	6.87
14	467	20	4.28	609	18	2.96
15	371	31	8.36	298	13	4.36
16	446	18	4.04	573	5	.87
17	186	14	7.53	308	14	4.54
Mean Percentage of Error						4.21
Sigma						1.64

control group at the beginning was not so high as that of the experimental, and at the end of the teaching periods the mean of the control group was not so low as that of the experimental. The middle fifty percent of the experimental group made a mean gain over twice as large as that made by the control group.

In the eighth grade the differences are even greater. Before the teaching, the percentage of error on the compositions written by the experimental group ranged from 3.94% to 17.81%. After the teaching, this range was from .67% to 6.34%, or a decrease in range of errors of 8.20%. Before the teaching, nine or almost one-half of the pupils made errors above 10%, and 17 or about six-sevenths of them made errors above 6.34%, the highest percentage made after teaching.

After the teaching, only four or one-fifth of them made errors above 3.94%, the lowest percentage at the beginning. The mean percentage of errors for the middle fifty percent of this group at the beginning was 9.90%; after the teaching the mean percentage was 2.79%.

TABLE 9

RESULTS ON ALL COMPOSITIONS FOR EIGHTH GRADE EXPERIMENTAL GROUP

PUPIL'S NUMBER	COMPOSITIONS WRITTEN AT THE BEGINNING			COMPOSITIONS WRITTEN AT THE END		
	Number Oppor.	Number Errors	Percentage of Error	Number Oppor.	Number Errors	Percentage of Error
1	292	52	17.81	386	20	5.18
2	531	46	8.66	602	15	2.49
3	434	38	8.76	448	3	.67
4	408	24	5.88	486	10	2.06
5	325	38	11.69	308	16	5.19
6	710	28	3.94	670	5	.75
7	358	51	14.25	363	23	6.34
8	441	61	13.83	351	10	2.85
9	301	38	12.62	335	11	3.28
10	646	71	10.98	424	14	3.30
11	312	20	6.41	326	7	2.15
12	432	39	9.03	421	10	2.38
13	377	29	7.69	391	10	2.56
14	597	48	8.04	509	7	1.38
15	395	20	5.06	321	6	1.87
16	380	34	8.95	332	4	1.20
17	311	39	12.54	355	18	5.07
18	317	40	12.62	420	13	3.10
19	564	38	6.74	454	17	3.74
20	394	61	15.48	530	20	3.77
Mean Percentage of Error						9.95
Sigma						3.62
						3.05
						1.63

There was a mean decrease in error of 7.11% for the middle fifty percent of the pupils of the eighth grade experimental group.

In the eighth grade control group before the teaching the percentages of errors on the compositions ranged from 3.26% to 22.09%. After the teaching, this range was from 1.30% to 15.77%, or a decrease in range of only 4.36%. This range is still 3.84% greater than that of the experimental group. Before the teaching, 12 or one-half of the group made above 10% errors, and 3 or one-eighth of the pupils made above 15.77%, the highest percentage made after teach-

ing. After the teaching, 19 or about five-sixths of the pupils made above 3.26%, the lowest percentage made at the beginning. The mean percentage of errors for the middle fifty percent of this group before teaching was 9.26%; after teaching the percentage fell to

TABLE 10
RESULTS ON ALL COMPOSITIONS FOR EIGHTH GRADE CONTROL GROUP

PUPIL'S NUMBER	COMPOSITIONS WRITTEN AT THE BEGINNING			COMPOSITIONS WRITTEN AT THE END		
	Number Oppor.	Number Errors	Percentage of Error	Number Oppor.	Number Errors	Percentage of Error
1	277	48	17.33	319	9	2.82
2	476	42	8.82	557	25	4.49
3	283	17	6.01	384	25	6.51
4	365	23	6.30	273	21	7.69
5	344	76	22.09	298	47	15.77
6	319	33	10.34	345	15	4.35
7	278	28	10.07	332	38	11.45
8	252	41	16.27	270	23	8.52
9	309	20	6.47	400	19	4.75
10	311	39	12.54	320	27	8.44
11	180	18	10.00	412	16	3.88
12	303	20	6.60	369	23	6.23
13	460	15	3.26	307	5	1.63
14	458	19	4.15	282	8	2.84
15	503	25	4.97	435	18	4.14
16	419	31	7.40	434	27	6.22
17	253	29	11.46	313	13	4.15
18	165	11	6.67	564	11	1.95
19	332	41	12.35	245	17	6.94
20	180	21	11.67	294	34	11.56
21	317	27	8.52	77	1	1.30
22	367	38	10.35	404	19	4.70
23	304	28	9.21	364	33	9.07
24	301	46	15.28	275	22	8.00
Mean Percentage of Error				10.01		
Sigma				6.13		
				4.46		
				3.44		

5.68%. This represents a mean decrease in error of only 3.58% for the control group in comparison to the 7.11% decrease of error of the experimental group of the same grade level.

The results on the compositions of the eighth grade are in perfect accordance with those of the ninth. Here again the means of the control group were not so high as those of the experimental group

TABLE 11

MEAN DECREASE IN PERCENTAGE OF ERROR OF MIDDLE FIFTY PERCENT OF ALL PUPILS ON THE COMPOSITIONS

GROUPS	BEGINNING MEANS	END MEANS	DIFFERENCE IN MEANS
Experimental 9-3	8.59	2.09	6.50
Control 9-1	7.09	4.26	2.83
Experimental 8-1	9.90	2.79	7.11
Control 8-3	9.26	5.68	3.58

at the beginning, nor so low at the end. Here too, the mean percentage of the gains of the experimental group is about twice that of the control group. We are confronted with the fact that eleven lessons of a practice nature on twenty-eight rules of punctuation eliminated twice as many errors with these eleven rules from children's compositions as did the more conventional method of teaching.

By consulting the tables of individual gains the reader may also find some interesting facts. For instance, in the ninth grade experimental group three pupils, numbers 6, 12, 13, made a decrease in percentage of errors of about 10 %; four pupils made percentages of error after the teaching below 1%. When a child makes this small a percentage of error on ten compositions, it is not worth while to take class time to teach him the use of these eleven rules. Only three children failed to decrease their errors as a result of the teaching. All three of these were in the control groups. Every child in the experimental groups decreased his errors. Six pupils in all groups made errors below 1%, and only one of these was in the control group. Six pupils in all groups made decreases of 10% in errors and all of these were in the experimental groups.

TABLE 12

MEAN PERCENTAGES OF ERROR ON COMPOSITIONS FOR ALL PUPILS

GROUPS	BEGINNING		END		DIFFERENCE BETWEEN MEANS
	Mean Percentages of Errors	Sigma	Mean Percentages of Errors	Sigma	
Experimental 9-3	8.23	3.03	2.26	1.48	5.97
Control 9-1	6.74	2.04	4.21	1.64	2.53
Experimental 8-1	9.95	3.62	3.05	1.63	6.90
Control 8-3	10.01	4.46	6.13	3.44	3.88

By comparing the mean percentages of error for the entire group of pupils we find about the same results as we do when comparing the means of the middle fifty percent. In the ninth grade a decrease of error of 5.97% mean points made by the experimental group is over twice the decrease of 2.53% mean points made by the control group in the same grade level. In the eighth grade the experimental group decrease of 6.90% mean points is almost twice the decrease of 3.88% mean points made by the control group.

The Pearson coefficient of correlation was calculated between the percentages of error made at the beginning and at the end in each group. The results are shown in table 13.

TABLE 13

CORRELATIONS BETWEEN PERCENTAGES OF ERROR MADE ON THE COMPOSITIONS AT THE BEGINNING AND AT THE END OF THE TEACHING

GROUPS	N	CORRELATION BETWEEN BEGINNING AND END
Experimental 9-3	21	.54
Control 9-1	17	.71
Experimental 8-1	20	.71
Control 8-3	24	.58

The formula for the standard deviation of the difference where the correlation is available was applied to the actual differences in the means of each group. The formula follows:

$$S.D._{diff.} = \sqrt{\frac{(S.D._1)^2}{N} + \frac{(S.D._2)^2}{N} - 2r \left(\frac{S.D._1}{N} \right) \left(\frac{S.D._2}{N} \right)}$$

The results of these calculations are shown in table 14.

TABLE 14

MEAN DIFFERENCES ON COMPOSITIONS FOR ALL GROUPS

GROUPS	DIFFERENCE BETWEEN MEANS AT BEGINNING AND AT THE END	S.E. OF MEAN GAINS	RATIO OF S.D. DIFF. TO MEAN GAINS
Experimental 9-3	5.97	.728	8.20
Control 9-1	2.53	.622	4.07
Experimental 8-1	6.90	.875	7.89
Control 8-3	3.88	1.141	3.40

Table 14 shows the mean differences in both the control and experimental groups to be statistically significant. Such gains could not have happened without good teaching going on in both groups. However, the gains made by the experimental groups are over twice those made by the control groups in terms of the standard deviation of the difference between them.

The same formula without the use of the correlation was applied to the results of the differences in means between the experimental and control groups. These differences in favor of the experimental groups were found to be 3.02 (S.D._{diff.}1.43) for the eighth grade, and 3.44 (S.D._{diff.}.957) for the ninth grade. These actual differences in means are 2.11 times their own S.D._{diff.} for the eighth grade and 3.59 times their S.D._{diff.} for the ninth grade. Both differences are statistically significant in favor of the practice exercises.

The results of the practice exercises are highly significant. They are statistically convincing in the tests and in the compositions. The results show that the pupils taught by the use of the practice materials did almost twice as well in eliminating the eleven errors on their compositions as did those taught by the methods used in the control groups. In view of the facts that all twenty-eight marks were taught in only eleven lessons and that only eleven marks were counted in the compositions, the enormous gains made by the experimental groups are astonishing.

The practice exercises also showed a reliable difference between the groups on the Leonard Proof-reading test, which measured pupils' abilities on all twenty-eight marks taught. The results on the compositions and tests show that we have used a method of teaching punctuation and capitalization to these children in the eighth and ninth grades of the Ethical Culture School which reduced the errors on their compositions made with these eleven rules by two-thirds. Such a method pursued with these children was extremely worth while.

PERMANENCY OF LEARNING

The same form of the Leonard Proof-reading test given at the close of the experiment, May 9, 1928, was repeated on December 13, 1928, seven months after the close of the experimental teaching. No one of the pupils had received intensive drill in punctuation since taking the May test. All of them, however, had received almost three months' work in English and had been criticized in individual

conferences for making punctuation errors on their compositions. Nine of the pupils were not available for the December test, so the examiner took the mean scores made on the May test by the same pupils taking the December test and compared them with the results of the December test. Table 15 shows the results of these tests.

TABLE 15
MEAN SCORES ON THE LEONARD PROOF-READING TEST FOR MAY AND DECEMBER

GROUPS	MAY MEANS	DECEMBER MEANS	ACTUAL GAINS
9 E	133.06	134.44	1.34
9 C	128.16	135.80	7.64
8 E	128.82	129.08	.26
8 C	117.26	121.78	4.52

The results show gains for all groups over their mean scores made on the test in May. The pupils maintained their high level of ability which was recorded in May immediately after the practice. The mean difference between the experimental and control groups in the eighth grade is still in evidence in favor of the practice group, while this difference is slightly reversed in favor of the control group in the ninth grade. It is interesting to note that after three months of regular classroom teaching in English in the fall of 1928, the control group in the eighth grade had not even caught up with the achievement of the experimental group at the end of the teaching periods in May. In the ninth grade it took about three months for the control group to attain and slightly surpass the mean score made by the experimental group in May. The practice exercises were not only effective in establishing the learning permanently, but were a very economical method of teaching.

Table 16 shows the average percentages of error on ten compositions (five at the beginning and five at the end) written by all pupils in each group. This percentage of error is given for each one of the eleven rules considered. This percentage is obtained by adding the total percentages of error for each group and dividing by four. In this table no distinction is made between the experimental and control groups, but all are added together in order to make the comparison only between the results on the punctuation marks before and after the teaching. The rule numbers correspond with those given on page 22.

TABLE 16

PERCENTAGES OF ERROR ON COMPOSITIONS WRITTEN AT THE BEGINNING AND AT THE CLOSE OF THE EXPERIMENT

RULE NUMBER	AVERAGE PERCENTAGES OF ERROR ON ALL COMPOSITIONS WRITTEN BY ALL PUPILS AT THE—	
	BEGINNING OF THE EXPERIMENT	CLOSE OF THE EXPERIMENT
1	5.48	3.48
2	2.51	1.15
3	2.30	1.17
4	5.08	1.94
5	35.56	9.87
6	5.26	3.42
7	58.43	34.84
8	67.06	49.86
9	81.36	34.75
10	29.96	20.96
11	9.61	5.82

A glance at table 16 will reveal that the greatest percentages of error at the beginning of the experiment were made with the rules in the following order—9, 8, 7, 5, 10, 11, 1, 6, 4, 2, 3. At the close of the experiment the order became 8, 7, 9, 10, 5, 11, 1, 6, 4, 3, 2. The order of the errors was only slightly changed by the teaching. Rules 7, 8, and 9 shifted places, as did rules 5, 10, 2, and 3. All other rules remained in the identical order as at the beginning. Rules 8 and 9 deal with the same general construction—commas with parenthetical constructions. These rules had a very high percentage of error at the beginning and end. It is difficult for these children to determine whether a phrase, a clause, or a word is used in a parenthetical manner. While the teaching in both groups improved the accuracy of punctuation with this special type of error, the errors were so frequently made at the close of the experiment that these children need much more drill on this type of construction. As far as punctuation is concerned, these children seem to have least difficulty in using commas with series of words, phrases, and clauses. This construction is rather easily recognized and lends itself to considerable accuracy once its meaning is understood. However, rule 7, which is of the same type, was the third most frequently violated at the beginning and second at the end. The statement was made at the beginning that

children had not followed any rule with this construction; that is, part of them had put commas before "and" in series, and part had not done so, while others had considered the matter optional. The suggestion that the rule is optional is probably the best procedure to use in teaching, and better results might have been obtained from this study if that procedure had been followed. But the investigator arbitrarily decided to teach the use of a comma before "and" when used in a series, and all children were taught by this method. The lack of this method to cause the pupils to accept this rule as their own is an interesting case of insufficient practice to dislodge previously formed bonds and to substitute new ones. Habits with this rule had already been rather definitely formed with these pupils, and insufficient practice was given to change these habits to any great extent. This is an outstanding example of insufficient remedial teaching. Psychologically we know it is more difficult to break down old habits or bonds and to form new ones to take their places than it is to form new ones at the outset. Either some definite uniform method of using this rule should have been taught these children earlier in their school life or this rule should not have been used in the experiment. However, one cannot say that the whole study is not shot through with remedial teaching for some and original teaching for others. It is not possible to control this factor in the experiment nor is it possible to tell what influence this factor has on the results. The average teacher usually faces both problems in most classes, so this factor may tend to make the group and the situation more natural ones. It would be interesting and worth while to determine, if possible, how much more practice it took to enable a child to relearn a rule after he had been taught it a different way than it took to teach him a rule the first time.

Turning our attention to the rules involving capitalization, rules 2, 3, and 4, we find that most errors were made with rule 4—capitalization of common nouns. As words are frequently capitalized according to the company they keep, it is next to impossible to explain to junior high school pupils why some words should not be capitalized at certain places. For instance, a recent well-known grammar says, "Capitalize adjectives derived from proper nouns such as Dutch and Creole; but do not capitalize negro or oriental." The teacher who tries to make that clear to a junior high school pupil has a worthy task. Then too, the children used in this experiment made many of

these mistakes in capitalizing words which they desired to emphasize. At the close of the experiment the percentages of error made with these three rules were so small that they may safely be disregarded in the further teaching program. Only occasional attention to individual violations of these rules needs to be considered by the teacher.

In his study of children's errors with capitals, Pressey¹ observed that the "most common use and greatest trouble with the capital is at the beginning of the sentence." The present study found this to be the second most used rule of capitalization, the one stating that common nouns shall not be capitalized having the greatest frequency; but these children made less errors with a capital at the beginning of a sentence than with any other rule of capitalization or punctuation. At the close of this experiment the errors made with this rule were so small as to be practically negligible.

¹ Pressey, S. L. "A Statistical Study of Usage and of Children's Errors in Capitalization." *The English Journal*, Vol. 13, December 1924, pp. 727-32.

CHAPTER VI

SUMMARY OF THE FINDINGS AND IMPLICATIONS OF THE STUDY

1. The Leonard Proof-reading test is a reasonably good instrument (validities .885 and .675; reliability .818) for predicting the average number of formal errors that these children will make in their ordinary classroom compositions.

2. On the results of the Leonard Proof-reading test for the ninth grade there is a mean difference in favor of the experimental group which is high enough to be reasonably significant, the actual mean difference being 1.98 times its own $S.D._{diff}$.

3. The results of this same test for the eighth grade show the difference in favor of the experimental group to be highly statistically significant—the actual difference is 2.46 times its own $S.D._{diff}$.

4. The results of the Pressey Punctuation test for the ninth grade show a difference of only .25 mean points in favor of the experimental group. This difference is only .30 times its own $S.D._{diff}$, and is not high enough to be significant.

5. The results of the Pressey Punctuation test for the eighth grade show a mean difference in favor of the experimental group which is 2.75 times its own $S.D._{diff}$, and is statistically significant in favor of the practice exercises.

6. The results of the Pressey Capitalization test for the ninth grade show a difference of .47 mean points in favor of the control group. This difference is only .91 times its own standard deviation of the difference and is not high enough to be significant.

7. The results of the Pressey Capitalization test for the eighth grade show a mean difference which is 1.54 times its own standard deviation of the difference. This difference is not high enough to be significant, but it is in favor of the practice exercises.

8. The results of the correction of error test are also in favor of the experimental groups for both grade levels. The mean number of errors made by the control group in excess of the experimental group in the ninth grade was 7.98, and 35.50 in the eighth grade.

9. The results of the dictation test are also in favor of the experimental groups for both grade levels. The experimental group in the eighth grade made 3.12% less errors than did the control group in the same grade; while in the ninth grade the experimental group made 1.73% less errors than did the control.

10. The results of these tests show that the differences between every test, except the Pressey Capitalization in the ninth grade, were in favor of the experimental groups. Or in other words, the practice exercises so improved the abilities of these pupils to punctuate that these differences were in evidence in tests of three types—proof-reading, error correction, and dictation.

11. The results of the compositions for the eighth grade show the mean difference in the percentage of error made to be 3.02% in favor of the experimental group. This difference is 2.11 times its own standard deviation of the difference and proves to be a significant difference.

12. The results of the compositions for the ninth grade show the mean difference in the percentage of error made to be 3.44% in favor of the experimental group. This difference is 3.59 times its own standard deviation of the difference and is a highly significant difference.

13. The results of the practice exercises are statistically convincing in the tests and in the compositions. The results show that the pupils taught by the use of the practice materials did almost twice as well in eliminating the eleven errors on their compositions as did those pupils who were taught by the methods used in the control groups. The experimental method enabled these children to reduce the errors on their compositions with these rules by two-thirds in eleven lessons.

14. These children made the highest percentage of error at the beginning and at the close of the experiment with rules number eight and nine. These rules involve the use of the comma with parenthetical expressions.

15. As far as punctuation is concerned these children seem to have least difficulty in using commas with series of words, phrases, and clauses.

16. Rule number seven, which requires the use of the comma before "and" when used in a series, was the second most frequently violated rule at the close of the experiment. This was probably due

to the fact that many of these children had been taught to use the comma differently or to disregard it entirely with this construction.

17. Rule number four, stating that common nouns should not be capitalized, was the most frequently violated rule of capitalization.

18. Rule number two, stating that the first word in each sentence should be capitalized, was used correctly more times than any other rule of capitalization considered in this study.

In the first chapter of this study the author pointed out the difference between proof-reading and original writing. If the two exercises—proof-reading and original writing—are different psychological processes, then transfer has taken place to produce the large gains made by the experimental groups. Unless this be true the children could not have learned to punctuate their compositions by practicing upon proof-reading and error correction exercises. As far as these results are concerned there is transfer from these kinds of exercises to writing compositions. If transfer has not taken place there is then a decided relationship between ability to proof-read and ability to write correctly. At least learning to punctuate by proof-reading has been remarkably effective in enabling these children to reduce their composition errors.

It is interesting to note the large gains made by both the experimental and control groups on the compositions. The mean gains for all groups were highly statistically significant. The investigator has not sought to compare one method against a very weak or an incidental method; but he has used two well organized procedures in teaching punctuation and capitalization. Both methods were valuable and both produced reliable gains in ability to punctuate. The children used in the study were above the average in intelligence (mean I.Q. about 125), were interested in improving their own writing, were conscious of their mistakes, had much to learn, and were able to learn rapidly.

What has been done for punctuation and capitalization is probably true for more general types of learning. Habits are better and more economically formed by practice in the skill to be acquired. Skills in other academic subjects could be better and more quickly learned by short periods of concentrated practice devoted to the specific elements involved, rather than by depending upon chance occurrence of such opportunities for learning the habits. If the kinds of exercises

used here have produced such outstanding results in this study, practice exercises in other subjects would probably be effective. One might safely say from the results of this study that if the same children and the same functions were used again in this or in any other academic subject similar results would be produced.

APPENDICES

RULES OF PUNCTUATION TAUGHT

Throughout the experiment the material prepared for teaching did not contain the term "rule," for the terminology "Always Remember That——" was substituted for it. Lesson number eleven of the teaching material contained a list of the rules studied in the order in which they had been presented. Each rule stated was followed by an example of its correct application. The following list is exactly the same as that one used in lesson eleven in the experiment, with the exception of the illustrations. The statement of the rule is the same as that given in each lesson, but the twenty-eight rules are divided into thirty statements.

Always Remember That——

1. A sentence that states a fact or gives a command needs a period at the end of it.
2. A question mark is needed at the end of a sentence that asks a direct question.
3. Every sentence must begin with a capital letter.
4. A period must be placed at the end of an abbreviation.
5. When quoting exact titles of any kind, always put quotation marks at the beginning and at the end of the titles.
6. When quoting a title, be sure to capitalize all the important words, but only the important words in the title.
7. When quoting the exact words of anyone else, always put quotation marks around the quoted words.
8. The first word of every sentence in a direct quotation must begin with a capital letter.
9. The pronoun "I" must always be capitalized.
10. A comma must be used to set off words of address.
11. Proper nouns must always be capitalized.
12. Proper adjectives must always be capitalized.
13. The possessive form of singular nouns is formed by adding 's to the singular form of the noun.
14. The possessive form of a plural noun is formed by adding only an apostrophe to the plural form of the noun.

(Note—When you find a noun that forms its plural by changing its form, like "Children," form the possessive plural in the same way that you do a singular noun, i.e. add 's.)

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15. Words, phrases, and clauses used in series in the same constructions and not connected by conjunctions are set off by commas.
16. Such words as "well, no, yes, etc.," used at the beginning of sentences are set off by commas.
17. Such words as "however, namely, therefore, etc.," when used in such a way that they may be left out without affecting the meaning of the sentence are set off by commas.
18. Each part of dates, names of places, and addresses used in sentences are set off by commas. No comma, however, is needed between the name of the month and the day of the month.
19. An apostrophe is used in contractions to mark the omission of letters.
20. A colon is used before long or formal quotations.
21. A colon is used after the word of salutation in a letter.
22. A colon is used before formal lists.
23. Parenthetical expressions, phrases, clauses, or words are set off from the rest of the sentence by commas.
24. Words in apposition are set off from the rest of the sentence by commas.
25. Non-restrictive clauses (clauses which may be omitted without changing the meaning of the sentence) are set off from the rest of the sentence by commas.
26. Independent clauses connected by coördinating conjunctions, such as "and, but, yet, etc.," are separated by a comma placed before the conjunction.
27. When using a broken quotation be sure to enclose all quoted words in quotation marks.
28. If you use only one sentence in a broken quotation, there must be only a comma after the word of saying, and the second part of the quotation must begin with a small letter. However, if you use two complete sentences, punctuate each one as a complete sentence. Of course, you will then begin the second sentence with a capital letter.
29. A semicolon is to be used to separate independent clauses which are not closely related, but are put into one sentence.
30. A comma is to be used to separate a long dependent clause used at the beginning of a sentence from the independent clause.

LEONARD PROOF-READING TEST IN PUNCTUATION

FORM A

Name..... Age.....

Class..... Date..... Boy or Girl.....

Here are several sentences printed without some necessary commas, capital letters, apostrophes, periods, question marks, quotation marks, colons, and semi-colons.

Read over each sentence carefully and then insert the necessary punctuation marks in the places where you think they belong.

Do not hurry. You will be given plenty of time to complete the test. When you have finished the test look over your paper; then sit quietly until you are asked to give your paper to the teacher. DO NOT CHANGE any punctuation mark used in the following sentences. Each mark used is correct; you are merely to fill in those which have been omitted. Each sentence is complete; there are no part sentences, and no sentences are run together. Read the entire sentence first to get its meaning. NOW BEGIN—

1. The train was made up of three pullman cars two day coaches a smoker and an observation car.
2. Thomas hardy a great english novelist died in 1928.
3. Charles Dickens wrote a tale of two cities.
4. Captain kidd said charles, was the best pirate that ever lived
5. the flower fell on the soldiers grave.
6. He arose to his feet and cried i will not stand for this outrage.
7. Charles you are excused from class today on account of your excellent work.
8. my brother has a habit of doing such queer things such as giving money to every beggar he meets.
9. Peter the cat we had in the country knew the supper hour he was never late to supper and he didnt have a wrist watch either.
10. My address this summer will be 37 Laclede avenue Cleveland ohio.
11. After the debate the senator asked, when shall we declare war
12. I am writing a paper on Children's love for poetry.
13. the following five girls belong to the basket-ball team Mary Louise Frances Ellena and Elizabeth.
14. Although he is afraid yet he is not a coward
15. another voice answered and then the first voice which was silvers took up the story
16. He deserved to succeed for he worked very hard.
17. Away went the wind laughing in glee.
18. He left the woods and walked along the Albany road on which he could make better progress.

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19. Fellows, said Wilson do you know what i would do if i owned half of that dog
20. You will probably be interested in reading Mr. Barrie's fantasy called peter pan.
21. Although i had not yet eaten the puppy begged for a bone.
22. New York City January 26 1928.
23. Mrs George Davis 27 Orange Avenue February 18 1928
24. A famous man once said "make the best of everything think the best of everybody hope the best for yourself".
25. Beauty is like a rainbow it is full of promise but short lived.
26. "Mr. Hornsby I'm sorry, but it is necessary to trade you to the Boston Braves", said the manager.
27. At the printing office we saw two wonderful machines namely the linotype and the monotype.
28. It is doubtless true that the World War which was the greatest crime in all history might have been avoided.
29. Mr Smith our principal was formerly an english teacher.
30. Columbia University confers the following degrees A B, A M, Ph D, and M D.
31. Who said that Becky our persian cat was killed yesterday
32. My schedule is full of many studies which i like such as art music and dancing.
33. It isnt true that Im the best friend your brother has.
34. Louis Untermeyer has compiled a book of poetry called this singing world, which you would probably be interested in reading.
35. "Mayor Jones" said the speaker "whose absurd english viewpoints are well known has caused considerable trouble in this city for he has made a direct attack upon the residents of the city.
36. What would happen father if I should miss the train
37. Read the following directions think before you write punctuate as you write never use a punctuation mark unless you are sure of its correct use.
38. As quickly as a hunted animal moves his mind searched for an answer.
39. One night there came to my house a stranger fleeing from justice.
40. George Washington who led the Revolutionary troops in America was a man with high ideals.
41. The foreigner who was a short and ugly Chinaman lived in the tenement section on the east side.
42. The Democratic Convention of 1928 met in Houston a city in Texas.
43. The Grand Canyon which is one of the National Parks is visited each summer by thousands of tourists.
44. Are you going abroad this summer for the purpose of attending many conventions such as the Art Convention in Prague'
45. I must return to school this afternoon but before I go I must see my doctor.
46. "George" said the coach "you will not need to report for basket-ball practice this afternoon for you have broken training rules".
47. There are several important causes for poverty such as ignorance of eco-

nomics, lack of ambition, and a craving for idleness on the part of the chief supporter of the family.

48. Dr Smith will you please report on your visit to the Orient?
49. Most peaceful men those who are interested in maintaining peace at any cost are strongly opposed to tax appropriations for battleships.
50. The attorney turned quickly to the jury and shouted, you must proclaim this man guilty.
51. Im positive that my profession is far more interesting than Browns for mine deals with the shortcomings of mens minds.

TEST MATERIAL

Mr. Herman Hagedorn, who was born in New York City, New York, on May 18, 1882, has written the following things: books on citizenship, plays on social subjects, poems of a racial nature, and short magazine articles. In one of his books called "You are the Hope of the World", he has a chapter on "Service", part of which I shall read to you.

Girls and boys of America, you are the hope of the world. Do you want to know why? Because the world is sick to death of war, and the world kings favor war and democracies abhor war, and because the United States is the most powerful democracy in the world; and because, when Europe's present leaders are dead, you girls and boys of ten, twelve, fourteen, sixteen, and seventeen will be governing the United States; and therefore, if you wish, leading the world. Be clear about this. The world looks to you in hope because you are the logical heirs of the present generation of leaders. If you have the sense and the go, the knowledge, the vision, and the largeness of heart to accept that inheritance, you will have it in your power to determine the course of the world's history for centuries to come.

The world asks you to think. It doesn't ask you to stand on the street corner and wave the flag; it doesn't ask you to enlist. Democracy isn't a success, Young America. As yet, it is neither a success nor a failure. It's just a gorgeous experiment that you and I and Tom and Mary and Jane and Betty and Jack could make a success that would shake the world if we'd only make up our minds to take democracy as seriously as we take, say, baseball or movies.

We know what America stands for; we know what America is. Have you ever thought what America might be? We're wasteful; look at our forests; look at the youth in our slums. We're materialistic; look at the faces in our cities; look how hard we are to arouse in defense of a principle; look how quickly, after our moment of sacrifice, we drop back into the sordid round of getting and spending.

As citizens we are indifferent. We will endure in our government every form of extravagance, inefficiency, and corruption rather than jump into the midst of the affair and help clean it up.

"We know all these things", you say, a little wearily. "But what can we do?"

"You can do everything", I say, "and you must do many things".

Many of your elders are idle, many are busy, and many are accustomed to corruption and meddling. Thinking is more laborious than digging trenches after you're forty, especially when you're out of training, and many of your elders are. But you, Young America, are not. Thinking to you isn't a chore; it's an adventure. Your minds are like a fresh horse, crazy to take six bars. You are the hope of the world because you have enthusiasm, because you feel, and because you haven't forgotten how to think.

You, the boys and girls of America, must create a new standard of values for your generation. For a century, men the world over, but especially here in the United States, have bowed to material success as to the greatest god

they knew. He who has dollars, we think, has success; he who has not dollars, has not success. It is the first duty of the man to be successful, we preached. Therefore, get dollars. We have been taught that success can be written only in figures, and a few have gathered in the dollars of the many; and, in consequence, we have slums and child labor and strikes.

CORRECTION OF ERROR TEST

Directions to Pupils:

Here is part of a story written by Robert Louis Stevenson called "The Sire de Maletroit's Door". Part of it is punctuated correctly, while part of it is not. Read the story very carefully, and when you come to a punctuation mark which you know to be used incorrectly, scratch it out; if another one is needed to take its place, you may insert the correct one. If you come to a place where no mark has been used and you think one is needed, insert the mark which you know to be correct. Now begin——

He found himself in a large apartment of polished stone. There were three doors one on each of three sides, all were similarly curtained with tapestry. Dennis recognised the bearings; and was gratified to find himself in such good hands: the room was strongly illuminated; but it contained little furniture, except a chair or two, the hearth was innocent of fire: and the table was but sparsely strewn with rushes, three days old.

On a high chair beside the chimney and directly facing Dennis, as he entered sat a little old gentleman, in a fur tippet. he sat with his legs crossed, and his hands folded and a cup of spiced wine stood, by his elbow, on a bracket on the wall. His countenance had a strong masculine cast, not properly human, but such as we see in the bull the goat or the domestic boar: something equivocal and wheedling, something greedy brutal and dangerous. . . .

Such was Alain, Sire de Maletroit.

Dennis and he, looked silently at each other, for a second or two.

"Pray step in, said the Sire de Maletroit. I have been expecting you all evening."

He had not risen but he accompanied his words with a smile, and a slight but courteous inclination of the head. Partly from the smile partly from the strange, musical, murmur, with which the Sire prefaced his observation Dennis felt a strong shudder of disgust and honest confusion of mind go through his bones. And when, with disgust and confusion, he could scarcely get words together in reply.

"I fear" he said "that this is a double accident. I am not the person you suppose me. It seems you were looking for a visit, but for my part nothing was further from my thoughts, nothing could be more contrary to my wishes, than this intrusion."

"Well well", said the old man, indulgently. "Here you are which is the main point? seat yourself my friend, and put yourself entirely at your ease. We shall arrange our little affairs, presently.

Dennis perceived that the affair was still complicated, with some misconception, and, he hastened to continue his explanations.

"Your door— he began.

"About my door?", asked the other raising his peaked eyebrows. "a little piece of ingenuity. And he shrugged his shoulders. "A hospitable fancy. By your own account you were not desirous, of making my acquaintance, we old people look for such reluctance now and then: when it touches our honor we ease about, until we find some way of overcoming it. You arrived uninvited but, believe me, very welcome".

"You persist in error sir" said Dennis, there can be no question between you and me, I am a stranger in this countryside. My name is Dennis. If, you see me in your house, it is only——"

"my young friend" interrupted the other. You will permit me to have my own ideas on that subject. They probably differ from yours at the present moment," he added with a chuckle "but time will show which of us is in the right".

Dennis was convinced he was to do with a lunatic he seated himself with a shrug, content to wait the upshot: and a pause ensued during which, he thought, he could distinguish a hurried gabbling.

The old gentleman meanwhile surveyed Dennis, from head to foot, with a smile and, from time to time, emitted little noises like a bird or a mouse which seemed to indicate a high degree of satisfaction. This state of matters became quite unsupportable, and dennis to put an end to it remarked, politely, that the wind had gone down. The old man fell into a fit of silent laughter, so prolonged, and violent, that he became quite red in the face; dennis got upon his feet, at once, and put on his hat with a flourish.

"Sir" He said "if you are in your wits, you have affronted me grossly. If you are out of them I flatter myself, I can find better employment for my brains, than to talk with lunatics. My conscience is clear, you have made a fool out of me, from the first moment; you have refused to hear my explanations: and, now, there is no power under god will make me stay here any longer, and, if i cannot make my way out in a more decent fashion I will hack your door in pieces, with my sword".

The Sire raised his right hand, and wagged it at Dennis, with the fore and little fingers, extended.

"My dear, nephew," he said, sit down".

"Nephew!" retorted Dennis, "You lie in your throat"; and he snapped his fingers in his face.

"sit down you rogue," cried the old man in a sudden, harsh, like the barking of a dog. "Do you fancy", he said. "That when I had made my little contrivance for the door, I had stopped short with that. If you prefer, to be bound hand and foot, till your bones ache, rise, and try to go away. If you choose to remain a free, young, buck, agreeably conversing with an old gentleman, why, sit where you are in peace and god be with you.

"Do you mean i am a prisoner," demanded Dennis.

"I state the facts," replied the other, "I would rather leave the conclusion to yourself".

Dennis sat down again, externally he managed to keep pretty calm, but, within, he was, now, boiling with anger, now, chilled with apprehension. He no longer felt convinced that he was dealing with a madman. And, if the old

gentleman was sane what, in Gods name, had he to look for. What absurd or tragical adventure had befallen him. What countenance was he to assume?

While he was thus unpleasantly reflecting, the arras, that overhung the chapel door, was raised and a tall priest, in his robes, came forth and, giving a long, keen, stare at Dennis, said something in an undertone to Sire de Maletroit.

"She is in a better frame of mind," asked the latter?

"She is more resigned messire," replied the priest.

"Now the lord help her she is hard to please," sneered the old gentleman. "A likely stripling, not ill-born, and of her own choosing too. Why what more, would the jade have".

"The situation is not usual for a young damsel," said the other and, somewhat trying to her blushes".

"She would have thought of that before she began the dance. It was none of my choosing god knows, that: but, since she is in it, by our Lady, she shall carry it to the end". And then, addressing Dennis, "Monsieur de Beaulieu", he asked "may I present you to my niece". She has been waiting, your arrival I may say, with even greater impatience than myself".

Dennis had resigned himself with a good grace all, he desired, was to know the worst of it, as speedily as possible, so he rose, at once, and bowed in acquiescence. The Sire de Maletroit followed his example, and limped toward the chapel door, and entered. The building had considerable, architectural, pretensions. A light groining sprang from six stout columns and hung down in two rich pendants, from the center of the vault. The place, terminated behind the altar, in a round end, embossed, and honeycombed, with a superfluity of ornament in relief, and, pierced by many, little, windows, shaped like stars, trefoils, or wheels. These windows were imperfectly glazed, so that the night air, circulated freely in the chapel. The tapers of which, there must have been a hundred burning on the altar were unmercifully, blown about, and the light went through many different phases of brilliancy, and semi-eclipse. On the steps, in front of the altar, knelt a young lady, richly attired as a bride. A chill settled over Dennis, as he observed her costume: he fought with desperate energy, against the conclusion that was being thrust upon his mind, it could not, it should not, be, as he feared.

Blanche", said the Sire, in his most flute-like tones. "I, have brought a friend to see you my little girl, turn round and give him your pretty hand, it is good to be devout, but it is necessary to be polite my niece.

The girl rose to her feet, and turned toward the newcomers.

LONG ERROR GUIDE

Note—This error guide was the first one prepared. The original plan was to score all compositions by it, but after 128 compositions had been scored this way, the short error guide given on page 22 of this study was substituted.

CAPITALIZATION

(omitted capitals)

1. Proper nouns
2. Proper adjectives
3. First word in quotations
4. First word in sentences
5. Principal words in literary titles
6. Capitalization of the pronoun "I"

(wrong capitals)

7. Common nouns
8. Common adjectives
9. Unimportant words in literary titles
10. First word of resumed quotations
11. Miscellaneous errors in capitalization

PUNCTUATION

(omissions)

Period—

12. End of declarative sentences
13. Abbreviations

Question Mark—

14. End of interrogative sentences

Comma—

(series)

15. Word series
16. Clause and phrase series
17. Before "and" in series
(independents)
18. Nominative of address
19. Appositives
20. Parenthetical expressions
21. With places, names, and dates (not in letter headings)
(non-restrictives)
22. Non-restrictive phrase and clause modifiers
(inverted order)

23. Clauses inverted
(between clauses)
24. Before coördinating conjunctions
25. Between independent and dependent clauses when break requires it
26. Miscellaneous clearness cases, preventing confusions, pauses, etc.
(letters)
27. Dates in letter headings
28. Friendly salutations
(quotations)
29. After introductory word of saying
30. After interrupted part in broken quotations of single sentences
(miscellaneous)
31. Before "such as"
32. Around "namely, however, therefore, etc."

Semicolon—

33. Between independent clauses when long

Colon—

34. Before formal quotations and lists
35. Letter salutations

Apostrophe—

36. Possessives
37. Contractions

Quotation Marks—

38. Before and after quotations
39. After interrupted part of broken quotations
40. Before resumed part of broken quotations
41. Around literary titles quoted

WRONG PUNCTUATION

Period—

42. For question mark
43. For comma with quotations
44. Miscellaneous

Question Mark—

45. After indirect question
46. Miscellaneous

Comma—

47. Between adjective and its noun
48. After and before literary titles
49. For semicolon
50. Between two non-coördinate adjectives
51. Before "and" needlessly
52. At insignificant pauses
53. Between name of street and its number
54. Between subject and verb
55. Miscellaneous

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Colon—

56. For semicolon

57. For comma before quotation

Semicolon—

58. For comma

59. In place of period

Apostrophe—

60. Wrong position in possessives

61. With plurals not in possessive

62. With possessive pronoun forms

63. Wrong place in contractions

Quotation Mark—

64. Around words of saying

65. Around indirect quotations

66. Around sentences within whole quotations

67. Miscellaneous

Miscellaneous—

68. Other violations not specifically listed

DIRECTIONS TO TEACHERS AT THE BEGINNING OF THE EXPERIMENT

Note—The following is a copy of the typed directions given to both teachers at the beginning of the experiment. In order that conditions might be uniform each teacher was required to read the following directions to all pupils before they wrote their compositions.

To the Teacher :

In order to have a test of what the pupils now know about the use of punctuation marks in writing their own compositions, it is necessary to have them write five papers of three different kinds at the beginning of the experiment.

Each paper is to be written in class, so we may conclusively say that the pupils had no help of any kind. Would it, therefore, be possible for you to ask your pupils in the experimental classes to write the following papers for you this week, so we may be ready to begin the experiment Monday, March 5?

Make certain that all in class follow directions, and in order that it may be a normal situation, I would prefer that they not be told upon what basis they are to be marked, or what use is to be made of the papers.

Each pupil is to spend forty minutes on each paper, except the letters, and twenty minutes are to be spent on each of these.

Here are the directions which you will need to give to the pupils in order that they may know how to prepare the papers.

1. (First Paper—Time 40 minutes) Today you are to be given forty minutes in which to prepare an original composition for me. I will not require any definite number of words, but write as much as you have time to write well during the period. It is always wise to use a few minutes at the first to outline briefly what you are going to put into your composition. You are to consult no books of any kind. Let it all be your own original work. Will you all write on the subject "My Summer Vacation". You may write about your past summer or your plans for the future one. Develop the composition in any way you choose. When you have finished sign your name on every sheet, and your name, your class, the date, and the words "Form A-1" at the top of the first sheet.
2. (Second Paper—Time 40 minutes) Repeat the same directions as for number one except assign this subject, "The Most Thrilling Experience I Ever Had".
3. (Third Paper—Time 40 minutes) Today you are to be given a period in which to prepare a written lesson in some subject. Take some subject which you have prepared for some class today and write it out as you would recite it to your teacher. You may write on any subject you choose except mathematics or a foreign language. Do not write on either of these sub-

jects. Refer to no books, as you are supposed to have your preparation ready for the subject upon which you choose to write. When you have finished sign your name on all sheets and your name, your class, the date, and the words "Form A-1" on the first sheet, and hand your papers to me.

4. (Fourth Paper—Time 20 minutes) Today you are to write two letters for me. Take twenty minutes for each letter. Here is what you are to do in the first letter. Listen carefully, so you will make no mistakes in getting directions.

Imagine that a friend has asked you a question which you cannot answer. Write me a complete, clear, and definite letter, heading it as though you were at your parent's home. Address it to me at the Ethical Culture School. Begin it by saying, "A friend recently asked me this question" and state the question in the exact words the friend used. Tell me who your friend is and why he is interested in an answer to the question. Then say that you could not answer the question, and, in the question form, ask me if I will answer it for you. Use the letter form you think best suited to such a letter. Sign your name in full.

(To teacher—After twenty minutes say, "Stop, pass your letters to me. Here are the directions for the second letter.")

5. (Fifth Paper—Time 20 minutes) Now write an ordinary social letter to a friend or relative. Say anything you want to say in the letter. When you have finished sign your name in full and pass your papers to me.

DIRECTIONS TO TEACHERS AT THE CLOSE OF THE EXPERIMENT

Note—The following is a copy of the typed directions given to both teachers at the close of the experiment. The "Anderson Story", read to the pupils, is also attached. Each teacher read these directions to the pupils for the final compositions.

To the Teacher:

The ultimate purpose of the entire experiment is to determine and to measure the improvement in the pupils' abilities to write their own compositions free from error as a result of the two methods of teaching. It is necessary, therefore, to have them write five papers of three different kinds at the close of the experiment.

Each paper is to be written in class, so we may say conclusively that the pupils had no help of any kind from those at home or from teachers. Will you, therefore, ask the pupils in both the experimental and control groups to write the following papers for you. This completes the experiment. You may do all of this in one week if you care to, but forty minutes time must be given to each of the three compositions, and twenty minutes to each of the letters. Make certain that all pupils follow directions. Here are directions which you will need to give to them.

1. (First Paper—Time 40 minutes) Today I want you to write for me a report of a trip you have taken sometime recently. Trips abroad are especially good subjects for this paper. Tell where you went and what you saw. In the paper imagine you had some conversation with some of the people you saw. What you said may be imaginary if you like, but report the conversation in the form of direct discourse. You may develop the report in any way you choose, but be sure to include the conversation in it. When you have finished sign your name on every sheet you hand in. On the first page put your name, class, date, and these words "Form A-2".
2. (Second Paper—Time 40 minutes) Put your name, your class, the date, and the words "Form A-2" at the top of your first sheet of paper. Then sign only your name on every other sheet of paper you hand in. Today I want you to imagine that you are either an actual newspaper or magazine critic or that you are writing for your school paper. Write a report of some book you have recently read or some play you have recently seen. The criticism may be favorable or unfavorable.
3. (Third Paper—Time 20 minutes) Sign your name, class, date, and the words "Form A-2" at the top of the first page. Sign your name on all sheets you hand in.

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First Letter—Write a business letter to any company you choose, ordering the following articles for your school baseball team:

5 fielder's mits
8 bats
2 dozen balls

3 catcher's gloves
3 masks

Then in a direct question ask the company for their latest sport catalogue.

Tell the company to send the goods to you at your school; mention the name and address of your school. Also give them your name and address in the body of the letter. Now begin, and I shall put on the board the list of the articles you are to order.

(At the end of 20 minutes say "Stop", and read these directions for the second letter.)

4. Second Letter—You are now to write a social letter. Sign your name, class, date, and the words "Form A-2" at the top of the first page. Sign your name on all sheets. Imagine that your father or mother is abroad. Write a social letter to one of them telling him or her what you are doing. Ask several questions about what he or she is seeing. Use as many long sentences as you can use correctly. Be sure, however, to make these long sentences clear.
5. (Fifth Paper—Writing time 25 minutes, reading time 12 minutes) Sign your name, class, the date, and the words "Form A-2" at the top of the first sheet, and your name on all other sheets you use. Now listen to a story which I am going to read to you. I shall read it only once. After I have finished it you are to rewrite it for me in your own words. Be sure to write it in the same form as I read it; that is, the story has considerable conversation in it, rewrite it using conversation. It has some long sentences in it; rewrite it using long sentences. There may be direct questions; use direct questions in rewriting it. Write the story as nearly like I read it as possible. It will, therefore, be necessary for you to listen very carefully to all of the details. As soon as I have finished reading, go to work at once, but do not do any work or make any notes while I am reading.

Now put your pencils down and listen to the story.

THE ANDERSON TRIP WESTWARD

Bennie Anderson sat on the lee side of the prairie schooner, watching the dancing campfire and listening to the howling of the coyotes.

Four months before, the Anderson family, consisting of Mr. and Mrs. Anderson, Thomas, a boy of nine years, and the solitary watcher by the campfire, named Benjamin, aged eleven years, had said good-by to Indiana.

Ill luck had always followed the Andersons in that state, and Bennie's father had said that perhaps a change of scene would also change their luck. So nearly all their belongings had been packed into the canvas-covered wagon, two dilapidated mules hitched to it, the old cow tied behind; and with the dog following beneath the wagon, they had left the tumble-down cabin and the

Indiana homestead, and had started for the frontier beyond the Mississippi.

Mr. Anderson was an old hunter, and as there were two rifles in the wagon, not to mention an old shotgun, there was usually plenty of fresh duck or prairie chicken to eat. Among the most cherished possessions was a very good field glass, which had been the property of an uncle who had used it in the Civil War. This glass proved to be their best ally upon the plains, where the stretches of the smooth land are so vast, and the distances so great, that the naked eye is wholly inadequate to the demands made upon it, especially if one wants to see all the wild life upon the plains as Bennie did.

The modest Anderson caravan had not journeyed far into the Missouri Bad Lands, at right angles to the old Oregon Trail, which so many adventurers had followed before and have since, before the signs of buffaloes became plentiful, although the boys at first did not recognize them. It was not until late September or early October, however, that the Andersons saw buffaloes in any numbers. Hitherto, there had been an occasional lonely bison feeding in some coulee, but they now began to see them in large numbers.

The jolting wagon had now pounded its weary way over the plains and through the Bad Lands and the desert-like portions of the prairies, where there was nothing but sagebrush and sprawling cactus, until they had reached a point near the northwest corner of Missouri.

It was not an infrequent sight to see upon the slope of a distant swell a dozen buffaloes peacefully grazing, like domestic cattle. They usually made off at a slow trot whenever the wagon got within a few hundred yards of them. Not knowing much of the habits or disposition of the bison, Mr. Anderson said that they would not attempt to kill any at present even for meat, as deer and other game were plentiful.

So they journeyed along without molesting the bison that they saw, satisfied to let them alone, if they were in turn let alone. This amicable arrangement might have held good until they reached their journey's end, in the heart of Kansas, had not something happened that made the killing of a few bison the price of safety to the party. This was an event that no one of the emigrants ever forgot as long as he lived, and an incident that filled one night as full of excitement and peril as it could well hold.

They had been traveling for two days over a nearly unbroken stretch of slightly undulating prairie. The summer sun had baked the earth until it was hard and lifeless. Every tuft of grass was burned to a crisp. Even the sagebrush that grew in all the shady spots seemed parched by the shimmering heat. The sky was a bright, intense blue, and each night the sunset was red and the afterglow partially obscured by a cloud of dust. The watercourses and the cottonwoods were half a day's journey apart, and an intolerable thirst was over all the landscape.

The second day of this trying desert-like prairie stretch of their journey was just drawing to a close when they noted upon the northern horizon what at first seemed to be a cloud of smoke. At the thought of a prairie fire upon such a parched area as these plains, a horrible fear seized upon the little party, and Mr. Anderson hurried to the top of the nearest swell to learn if their worst fears were true.

On mounting the eminence, he discovered that the cloud extended from the east to the west as far as the eye could reach. It certainly was not smoke, but each moment it grew in density and volume, like a menace, something dark and foreboding that could engulf them.

Presently as he watched, he thought he heard a low rumbling, like the first indistinct sounds of thunder, and putting his ear to the ground Indian fashion, he could hear the rumbling plainly. It was like the approach of a mighty earthquake, only it traveled much more slowly; like the rumbling of the surf; like the voice of the sea, or the hurricane, heard at a distance.

Again the anxious man scanned the dark, ominous-looking cloud that now belted the horizon, and this time he thought that he discerned dark particles like tiny dancing motes in the cloud. Then as he gazed, the specks grew larger, like gnats or small flies, close to where the horizon line should have been. Here and there were clouds of the dark specks, like swarms of busy insects. But what a myriad there was. In some places they fairly darkened the cloud. Then in a moment the truth dawned upon the incredulous man, leaving him gasping with astonishment and quaking with fear. All these tiny specks upon the horizon were buffaloes.

For a few seconds he gazed, fascinated and held to the spot by his very fear and wonder of it all. Darker and darker grew the cloud. Plainer and plainer the headlong rush of the countless host was seen, while the rumbling of their thousands of hoofs, which at first had been like distant thunder, now swelled to the volume of a rapidly approaching hurricane. The solid earth was felt to vibrate and rock, to tremble and quake.

Mr. Anderson waited to see no more, but fled back to his family, whose escape from this sea of hoofs now seemed to him almost hopeless. The boys hurried to meet him, their faces pale with fright. Mr. Anderson made his plan of escape as he ran. They could not flee, there was no coulee in which to take refuge, no butte to which they might flee or anything to hide behind. The danger must be met out in the open with nothing but the shelter of the wagon to keep off the grinding hoofs, and only the muzzles of their three guns to stand between them and annihilation when the crash came.

Hastily they turned the wagon about, with its hind end toward the herd. The mules were unhitched from the pole and each hitched to the front wheel. A rope was also passed through the side strap of the harness of each mule, and he was fastened to the hind wheel of the wagon, so that he could not swing about and be across the tide when this sea of buffaloes should strike them. This kept the mules with their hoofs toward the herd, thus securing the additional aid of a mule's heel on guard at each side of the wagon. Old Brindle, the cow, was secured to the pole of the wagon where the mules had been. The wheels were blocked. What furniture the wagon contained was piled up behind to help make a barricade. When all had been made as snug as possible, the family crawled under the wagon and awaited results. The muzzles were held in readiness for an emergency at either side of the wagon, while Mrs. Anderson had the shotgun in readiness to reinforce the garrison should they need more weapons at a moment's notice.

Nearer and nearer came the Thundering Herd. Bennie gritted his teeth

together and tried hard not to let the muzzle of his rifle shake as he pointed it out between the spokes of the hind wheel on his side of the wagon.

On came the terrible battalions of galloping hoofs until the frontlets of the bulls could be seen a few rods away. Almost before they had time to realize it, the mad, galloping, pushing, snorting herd was all about them, pounding by so close that the coats of the nearest bulls brushed the sides of the mules. At first they seemed to turn out a bit for the wagon, but presently a bunch of buffaloes, more compact than the rest of the herd, were charging upon the schooner.

"Ready with your rifle, Bennie", called Mr. Anderson, and father and son both cocked their guns. When the bunch was almost upon them, both fired, and a mighty bull fell kicking against the back of the wagon, but his kicks were not of long duration, for at this short range the rifles did fearful execution. There was no respite, however, for close behind the fallen bull came more, and Mr. Anderson reached for the shotgun, and piled another bull upon the first, although he had to finish him with a Colt's revolver, which was destined to stand them in much better stead than their guns.

Old Abe, the mule upon the right side of the wagon, now took his turn in the fray, for a bull galloped too close to him, raking Abe's flank with his sharp horns. The mule let both heels fly, striking another bull squarely in the forehead, and felling him to the ground. But a buffalo's skull is as thick as a board, and the bull jumped up and galloped on with his fellows.

Presently another bunch was seen bearing down upon them. They were close together and crowding and did not seem likely to give way for the crouching fugitives under the wagon. Although Bennie and his father both fired, yet they struck the wagon with a terrific shock. There was frantic kicking and frenzied braying from both Abe and Ulysses and a violent kicking and pounding in the wagon that seemed to be immediately over their heads.

It was plain that instantaneous action of some kind was necessary if their domicile was to be saved, for one of the crowding bulls had been carried into the wagon. He had become entangled in the top, and was pawing and kicking to free himself. His great head had protruded over the seat. Mr. Anderson reached up quickly with the Colt's and put an end to his kicking with two well directed shots.

There were now four dead bulls piled up behind the wagon and one inside of it, and soon the blood from the last victim came trickling through upon the helpless family. It was a gruesome position, but they could not escape it, and all were so glad that the blood was not their own that they did not mind.

Suddenly old Abe uttered a piercing cry in which were both terror and pain. He accompanied the outcry with a vicious kick, but almost immediately sank to the earth, kicking and pawing. It was then seen that a bull had ripped open the mule's left side, giving him a mortal wound. His frantic kicking so endangered the cowering fugitives under the wagon that Mr. Anderson was obliged to shoot him.

Old Brindle at this point became unmanageable, breaking her rope, so that the seething black mass swallowed her.

"There goes old Brindle, too", sobbed Tommy. "I guess we'll starve now".

Poor Shep, who had been securely tied at the foreward end of the wagon, cowered and whimpered as though he too thought the judgment day had come, and it was his and Tommy's lot to comfort each other—the dog licking the boy's hands, and he in turn patting the dog's head.

Half an hour and then an hour went by, and still there was no diminution of the herd. The second hour and the third passed, and still they came, crowding and pushing, blowing and snorting.

"Won't they ever go by, Father?" asked Bennie. "I should think there were a million of them".

"It is the most wonderful thing that I ever saw", replied Mr. Anderson. "I have often heard old hunters tell about the countless herds of buffaloes, but I had always supposed they were lying".

"Go to sleep, boys", said Mr. Anderson, "and if I need you I will call you".

The last thing Bennie remembered was the thunder of the myriad hoofs. Soon these sounds ceased for him, and he and his brother slept.

When he again opened his eyes the sun was shining brightly, and the clouds of dust that had obscured the moon when he fell asleep had been partly dissipated. Here and there he could see an occasional buffalo, but the mighty herd had gone.

"It's the tail end of the procession, boy", called Bennie's father. "The last installment went by about fifteen minutes ago. I did not dream that bison could be found in such numbers in western Missouri at the present time. I had supposed the few scattering herds that we saw were all that were left in this state".

This conclusion of Mr. Anderson's was quite right, but that autumn, for some unaccountable reason, the great herd had come for part of the way on the Missouri river on its southern migration following the old trail of two decades ago, instead of crossing western Nebraska and Kansas. It had been a costly experiment, however, for all the way hunters had swarmed upon their flanks, and they had lost thousands of head. But what did that matter? Their number was legion.

(From "Literature and Life." Book 2, pp. 41-48. Scott Foresman and Co. "The Thundering Herd" by Clarence Hawkes)

MIMEOGRAPHED LESSON NUMBER 3

Note—This lesson is a sample of those used in teaching both groups throughout the experiment. Part I was given to both the control and the experimental groups. Each lesson was prepared in the same way and this one is typical of them all.

PART I

In previous lessons you have already learned the use of the following marks of punctuation:

- a*—Use of periods at the end of declarative and imperative sentences
- b*—Use of question marks at the end of sentences that ask a question
- c*—Use of capitals at the beginning of sentences
- d*—Use of periods at the end of abbreviations
- e*—Use of quotation marks around quoted titles
- f*—Use of capital letters for important words in titles.

In the last lesson we learned that quotation marks should be used around titles which are quoted. We often quote words which other people say that are not titles, but merely some other person's words used in speaking and writing. We always put quotation marks around any words we use that are not our own, whether they are titles or quoted words. Look at these sentences:

"Give me liberty or give me death", shouted Patrick Henry.

My brother said to me, "May I go to the theater with you?"

My brother wanted to know if he could go to the theater with me.

These words are engraved on Stevenson's tomb: "Home is the sailor, home from sea".

Notice the bars under the quotation marks used in all of these sentences. Look at them carefully and you will see that the words were quoted. In all of the sentences except number three, these words are quoted directly as the speaker said them and are called direct quotations. In sentence number three we have another person's words changed so that they are not quoted directly. This kind of sentence is an indirect quotation, and requires no quotation marks. Now look at these sentences again carefully, so that you may not get confused on direct and indirect quotations.

Now glance back over these sentences and you will see that the first word in each sentence in the direct quotations begins with a capital letter. You will need to remember that the first words in all quoted sentences begin with capital letters. However, when quotations are broken before the sentence is completed by words not quoted, then the first word in the resumed quotation is not capitalized. Here is an example of this:

"We have decided to remain at home today," said Mary.

"We have decided", said Mary, "to remain at home today."

Notice in the first sentence the quotation is all together, but in the second

sentence the same quotation is broken in the middle by the words "said Mary". In both sentences the first word of the quotation, the word "we", is capitalized. Look at the word "to", after the word "Mary" in the second sentence. It is not capitalized because it merely continues the sentence which was started by the word "we". Is it clear to you what I mean by the statement that the first word in each direct quotation should be capitalized?

Now suppose you use a sentence like this:

The teacher turned to the boy and said, "Charles, you know how to use quotation marks correctly."

Or suppose you use a sentence like this:

Finally he turned and shouted, "Officer, arrest this man."

Look at both sentences and you will see that the first word in the quotation is a word of address. That is, the speaker is calling someone by name and addresses him by his name. Your mother does the same thing when she says, "Robert, please get me a book from the library table." Notice that I have placed a comma after these words of address, "Robert, Officer, and Charles". Can you remember to do that at all times? You will have many chances to use commas in this way, so do not forget it.

Here is something which you have probably always known. The pronoun "I" is used very often, and no matter where it is used, whether at the beginning, in the middle, or at the end of a sentence, it is always capitalized. Here is an example:

I want a position where *I* may do my best.

Always Remember That—

When you quote the words of anyone else in a direct quotation, always put quotation marks around them.

The first word of every sentence in a direct quotation must begin with a capital letter.

The pronoun "I" must always be capitalized.

A comma must be placed after a word of address in quotations.

PART II

PROOF-READING PRACTICE EXERCISES FOR EXPERIMENTAL GROUP

Here are some sentences in which you will have an opportunity to practice what you have learned. Some of the sentences contain quoted titles, and others contain quoted words. Put in the proper quotation marks, the proper capitals in the quotations, and if you find a quotation with a word of address used, be sure to put the comma in the right place. Watch out for indirect quotations which require no quotation marks. Also be very careful to capitalize the pronoun "I".

1. Unfurl your flags and load your guns, cried Stanley.
2. Stanley heard a voice behind him say, good morning sir.
3. Susie you frightened me, said Stanley.
4. Lincoln has been called the savior of his country.
5. He said he was nine years old when he started to school.
6. From then on i went to school by littles, he said.

7. Lincoln you are a very dull pupil, said his teacher.
8. Louis Pasteur, a famous French scientist, said he came from a poor family.
9. My father was a poor tanner and i had few opportunities, he said.
10. His teacher turned to him one day and said, Louis some day you will startle the world with your experiments.
11. Pasteur has done this very thing, said the speaker.
12. A new book has been placed on the market called elbert hubbard's notebook, which is a companion volume to elbert hubbard's scrapbook.
13. The speaker presented a report on the activities of the literary guild of america.
14. I saw a new English book today called advanced lessons in everyday english.
15. Next month Walter Hampden will play in henry the fifth.
16. Make way for liberty, he cried.
17. The expression, fifteen men on a dead man's chest, comes from treasure island, by Robert Louis Stevenson.
18. And when i come again, he continued, i will repay you all.
19. In this, i have learned that mercy is sweeter than vengeance, said he.
20. You do not know me now, he said, but you shall know me in the course of a few minutes.

ERROR CORRECTION EXERCISES FOR THE EXPERIMENTAL GROUP

Here is a short paragraph which has considerable conversation in it between a tortoise and some geese. It is full of incorrect punctuation. Some of the punctuation, however, is correct. Pick out the incorrect punctuation, cross it out with an "x", and put in the punctuation which you think is correct.

a tortoise, having grown tired of the place in which he had lived for many years, asked two wild geese if they would carry him to a new home?

"We are willing to carry you", said the geese", "But you must tell us how to do it?

"if you will each take an end of this stick, "i will hold on to the middle by my mouth, "said the tortoise".

"can you keep your mouth closed while we fly. "asked the geese?"

Remember, turtle, if you try to talk, you will surely fall?

"When the tortoise assured them that he would not try to talk," the geese consented to carry him. In a moment they all rose into the air, and the strong wings of the geese bore them easily along. Some people working in the fields saw the strange sight and "called to each other in surprise".

"The tortoise will surely fall. "they said".

"He cannot keep his mouth closed on that stick? said others".

This made the tortoise so angry that he opened his mouth to say. I can keep my mouth closed".

"Before he could say the words, however, he fell to the ground".

"What is the moral to this story. asked Mary? who was sitting by the fire listening to her grandfather tell her this story I have just told you".

"Well. said her grandfather", what harm could the people below do to the turtle by talking about him".

DICTATION PRACTICE EXERCISES FOR EXPERIMENTAL GROUP

To Teacher—Read the lines below to the pupils. Read each sentence only twice. The pupils are to put in the punctuation marks which they have studied today. The other marks, which you will please read to them, are underlined in the paragraph. You will then use this copy as your key and correct the pupils' papers by it.

To Pupils—

Here is a story of a Mock Turtle's School Days as told by himself. I am going to read it to you and ask you to put in the correct quotation marks, capitalize the first word in the quotations, and capitalize the pronoun "I". I shall read each sentence only twice, and as I read it I shall tell you where some punctuation marks belong. Put these in where I tell you to when I read them.

Ready—Begin—

"Once", said the Mock Turtle at last, "I was a real turtle".

"When we were little", the Mock Turtle went on, "we went to school in the sea. The master was an old turtle we used to call him Tortoise".

"Why did you call him Tortoise?" asked Alice.

"We called him Tortoise because he taught us", said the Mock Turtle.

"Alice, you ought to be ashamed of yourself for asking such a simple question", said the frog.

"Drive on, old fellow. Don't be all day about it", said the frog to the Turtle.

"Yes, we went to school in the sea though you may not believe it".

"I never said I didn't", interrupted Alice.

"Hold your tongue", shouted the frog.

PART II

EXERCISES FOR THE CONTROL GROUP

Here is a Hindu Tale called "The Brahmin, The Tiger, and the Six Judges". The punctuation marks which we have studied today are used a number of times in the story. Pick out these marks that we have studied today and tell why each one is used as it is. After we have done this we will try to find the marks we have studied in the last two lessons and tell why they are used as they are.

Once upon a time a Brahmin, who was walking along the road, came upon an iron cage, in which a great tiger had been imprisoned.

The Tiger called out, "Brother Brahmin, Brother Brahmin, have pity on me, and let me out of this cage for one minute, only to have a little water, for I am dying of thirst".

The Brahmin answered, "No, I will not; for if I let you out of the cage you will eat me".

"Oh, father of mercy", answered the Tiger, "in truth that will I not. Only let me out, that I may drink some water and return.

Then the Brahmin took pity on him and opened the cage door; but no sooner had he done so than the Tiger, jumping out, said, "Now, I will eat you first and drink the water afterward".

But the Brahmin answered, "Only do not kill me hastily. Let us first ask the opinion of six, and if all of them say that it is just and fair that you should put me to death, then I am willing to die".

"Very well", answered the Tiger, "it shall be as it is; we shall first ask the opinion of six".

So the Brahmin and the Tiger walked on until they came to a Banyan-tree, and the Brahmin asked it for judgment.

"On what must I give judgment?" asked the Banyan-tree.

The Brahmin told the story.

The Banyan-tree answered, "Men often come to take shelter in the cool shade under my boughs from the hot rays of the sun; but when they have rested they cut and break my pretty branches and scatter my leaves. Let the Tiger eat the man, for men are an ungrateful race".

Then the Tiger would have instantly killed the Brahmin; but the Brahmin said, "Tiger, Tiger, you must not kill me yet, for you promised that we should first hear the judgment of six".

"Very well", said the Tiger.

After a little while they met a camel. "Sir Camel, Sir Camel", cried the Brahmin, "hear and give judgment".

"On what shall I give judgment?" asked the Camel.

And the Brahmin told the story and asked his opinion.

The Camel replied, "When I was young and strong and could do much work, my master took care of me and gave me good food; but now I am old and have lost all my strength in his service, he overloads me and starves me, and beats me without mercy. Let the Tiger eat the man, for men are an unjust and cruel race".

The Tiger would then have killed the Brahmin, but the latter said, "Stop, Tiger, for we must hear the judgment of six".

So they both went on again. At a little distance they saw a bullock.

The Brahmin asked him for judgment.

"On what?" asked the Bullock.

The Brahmin repeated his story to him. "Tell me", he said, "is it fair he should eat me?"

The Bullock said, "Yes, let the Tiger eat the man, for men have no pity".

They next met an Eagle flying through the air, to whom the Brahmin cried, "O Eagle, great Eagle, hear and give judgment".

"On what must I give judgment?" asked the Eagle.

The Brahmin stated the case, but the Eagle answered, "Whenever men see me they try to shoot me. Let the Tiger eat the man, for men are the persecutors of the earth".

Then the Tiger began to roar, and said, "The judgment of all is against you, O Brahmin".

But the Brahmin answered, "For two others must be asked".

After this they saw a Crocodile and asked him to pass judgment. He too said, "Let the Tiger eat the man".

The Brahmin gave himself up as lost; but there was to be one more judge.

Now the sixth was a Jackal. She said, "It is impossible for me to decide

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who is in the right and who is in the wrong unless I see the exact position in which you were when the dispute began. Show me the place”.

So they returned to the place where they first met, and the Jackal went with them.

The Jackal then said, “Now Brahmin, show me exactly where you stood”.

“Here”, said the Brahmin.

“Exactly there, was it?” asked the Jackal.

“Exactly here”, replied the Brahmin.

“Where was the Tiger then?” asked the Jackal.

“In the cage”, answered the Tiger.

“How do you mean?” asked the Jackal; “how were you in the cage? Which way were you looking?”

“Why, I stood so”, said the Tiger, jumping into the cage, “and my head was on this side”.

“Was the cage door open or shut?” asked the Jackal.

“Shut and bolted”, said the Brahmin.

“Then shut and bolt it”, said the Jackal.

When the Brahmin had done this, the Jackal said, “Oh, you wicked and ungrateful Tiger. Since the good Brahmin opened your cage door, is eating him the only return you would make? Stay there, then, for the rest of your days, for no one will ever let you out again. Proceed on your journey, Friend Brahmin. Your road lies that way and mine this”.

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